

2<sup>nd</sup> Meeting of the LRIT NCA's  
SafeSeaNet Workshop no 13  
Lisbon, 29 March 2010

Agenda item 10  
SSN 13/2/2 (v.1.0)  
23 April 2010

## XML Reference Guide v.2.03 – Corrections and improvements

### Submitted by EMSA

<i>Executive summary</i>	This document introduces a number of corrections and improvements deemed necessary for the correct development of SafeSeaNet v.2.
<i>Action to be taken</i>	Member States are invited to agree on the proposed changes
<i>Related documents</i>	<ul style="list-style-type: none"><li>▪ XML Reference Guide version 2.03</li><li>▪ Member State comments and proposals XMLRG v.2.03</li></ul>

## 1 BACKGROUND

The version 2 of SSN XML Reference Guide, which contains the technical specifications for the development of PortPlus and ShipCall messages in SafeSeaNet, was introduced at the 11<sup>th</sup> SSN Group meeting and hence approved by Member States. Further improvements and corrections were introduced since and transposed in different documents, up to the current version 2.03, currently applied by EMSA's and Member States' contractors for the development of the relevant applications.

Since the delivery of version 2.03, some Member States have actively participated in reviewing such document and proposing additional corrections, changes and improvements by correspondence to EMSA. Such proposals are gathered in an annex to this paper.

## 2 AMENDMENTS TO THE XMLRG v. 2.03

Thanks to the valuable contributions of some MS, a number of mistakes have been recognised and some improvements proposed.

To the light of the ongoing development of SSN v.2, such changes are proposed in the attachment to this document, divided in three sections:

1. **Errata Corrigé and corrections:** clarification of typing errors, inconsistencies between different parts of the XML Reference Guide or precisions of agreed rules (e.g. wrong attributes' name or correction of some queries' criteria).

**IMPACT:** minor changes deemed necessary for the correct implementation of the agreed SSN v.2.

2. **Critical correction:** under this section there is an additional attribute to be included in both SSN2MS\_ShipCall\_Req.xml and MS2SSN\_ShipCall\_Res.xml messages. This

new attribute called *GetHazmatType*, being inserted under the *AdditionalSearchCriteria* element, is crucial to permit to MS application to duly provide for the relevant HAZMAT details whenever a ShipCall request message is received from SSN. If this value is not specified by SSN in the request, MS application will not be capable to provide for the relevant HAZMAT information in the ShipCall response.

**IMPACT:** There is an impact either on MS and SSN-core applications developments, which have to be slightly amended by including this new attribute in the relevant XML messages.

3. **NON-Critical corrections:** under this section 7 amendments/improvements of the XMLRG v.2.03 are proposed. These changes could improve the final SSN v.2; however, at this stage they are proposed as optional amendments.

**IMPACT:** Should MS decide to apply the same rules and solutions at national level, it implies that the ongoing developments of the national SafeSeaNet applications will have to be adapted accordingly.

### 3 ACTIONS REQUIRED

The SSN NCAs are invited to:

- Note the corrections as referred to in the annexed Errata Corrige;
- Agree on the application of the critical corrections and the inclusion, in the relevant ShipCall request and response messages, of the new *GetHazmatType* attribute;
- Comment and decide accordingly for the application of the non-critical corrections.

Attachment: XML Reference Guide v.2.03 – Amendment n. 1

Annex to the document SSN 13/2/2

## XML Reference Guide v.2.03 - Amendment no 1

### Errata Corrige

#	Page	Affected part	XML message	Original text	Amended text	Justification
1	1	Cover	-	New text	Reference document of the IFCD defined in Annex III, paragraph 2.3 of Directive 2009/17/EC amending Directive 2002/59 EC establishing a community vessel traffic monitoring and Information system	To be consistent with XMLRG v.2.0
2	66	TotalPersonsOnBoard attribute (XML message)	MS2SSN_Port_Not	99999 if actually unknown a	99999 if actually unknown and in case NextPortOfcall="ZZCAN"	Clarify best practice rule on mandatory field "TotalPersonsOnBoard"
3	88	Introduction	MS2SSN_PortPlus_Not	§ Notification of dangerous and polluting goods carried onboard a ship bound for an EU port, either when coming from a non-EU or an EU port (HAZMAT)	§ Notification of dangerous and polluting goods carried onboard a ship leaving or bound for an EU port, either when coming from a non-EU or an EU port (HAZMAT)	Clarification of the introduction wording
4	90	HazmatOnBoard Y/N attribute (overview)	MS2SSN_PortPlus_Not	HazmatOnBoard Y/N	HazmatOnBoard <del>Y/N</del> YorN	Correction
5	91	UpdateStatus attribute (XML message)	MS2SSN_PortPlus_Not	Update process and relevant rules: 1. PortPlus message includes a number of optional elements which are to be selected and included in the message by the dispatcher due to the event to be reported (pre-arrival, arrival, departure etc.). For example, E.g, in case of a pre-arrival notification, the message may	Update process and relevant rules: 1. PortPlus message includes a number of optional elements which are to be selected and included in the message by the dispatcher due to the event to be reported (pre-arrival, arrival, departure etc.). For example, E.g, in case of a pre-arrival notification, the message may include the	The example WORDING was misleading

#	Page	Affected part	XML message	Original text	Amended text	Justification
				include the PreArrival3DaysNotificationDetails, the PreArrivalNotification24HoursDetail Is and the HazmatNotificationInfoNonEUdepa rtures elements information. At this stage actual arrival and departure related elements will not be allowed because it is meaningless in a pre arrival stage. An update message should always include: [...]	PreArrival3DaysNotificationDetails, the PreArrivalNotification24HoursDetail s and the HazmatNotificationInfoNonEUdepa rtures elements information. <del>At</del> <del>this stage actual arrival and</del> <del>departure related elements will not</del> <del>be allowed because it is</del> <del>meaningless in a pre arrival stage.</del> An update message should always include: [...]	
6	94	ATAPortOfCall attribute (XML message)	MS2SSN_PortPlus_Not	Format "YYYY-MM- DDThh:mm:ssTZD" Where TZD = time zone designator (Z or +hh:mm or - hh:mm)	<del>[After]</del> Format "YYYY-MM- DDThh:mm:ssTZD" Where TZD = time zone designator (Z or +hh:mm or - hh:mm) <del>[to include] ATAPortOfCall &lt;</del> <del>ATAPortOfCall</del>	To enforce validation rule
7	94	ATDPortOfCall attribute (XML message)	MS2SSN_PortPlus_Not	Format "YYYY-MM- DDThh:mm:ssTZD" Where TZD = time zone designator (Z or +hh:mm or - hh:mm)	<del>[After]</del> Format "YYYY-MM- DDThh:mm:ssTZD" Where TZD = time zone designator (Z or +hh:mm or - hh:mm) <del>[to include] ATDPortOfCall &gt;</del> <del>ATAPortOfCall</del>	To enforce validation rule
8	94	POBVoyageTowardsPortOfCall attribute	MS2SSN_PortPlus_Not	POBVoyagetowardsPortOfCall	POB <del>V</del> oyage <del>T</del> owardsPortOfCall	Correction of the attribute's name
9	186	XML message example	MS2SSN_ShipCall_Req	The example is wrong	New example to be provided	Correction of the example
10	190	TimeoutValue attribute	MS2SSN_ShipCall_Res	<del>Delete attribute</del>	-	Delete the attribute which was reported due to a typing error
11	192	TimeoutValue attribute	MS2SSN_ShipCall_Res	<del>Delete attribute</del>	-	
12	197	TimeoutValue attribute	SSN2MS_ShipCall_Res	<del>Delete attribute</del>	-	
13	198	POBVoyageTowardsPortOfCall attribute	SSN2MS_ShipCall_Res	POBVoyagetowardsPortOfCall	POB <del>V</del> oyage <del>T</del> owardsPortOfCall	Correction of the attribute's name

#	Page	Affected part	XML message	Original text	Amended text	Justification
14	203	POBVoyageTowardsPortOfCall attribute	SSN2MS_ShipCall_Res	POBVoyagetowardsPortOfCall	POB <b>V</b> oyage <b>T</b> owardsPortOfCall	Correction of the attribute's name
15	181	Table 1 - 1. ExpectedCallOfSelectedShip	-	Data relevant to expected calls of a ship (on the basis of ETA)  The SSN EIS shall first identify all the Ship Calls for the specified vessel with ETAToPortOfCall "in the future" with respect to the StartDateTime set by the data requester. Then, the query shall list the ShipCall with ETAToPortOfCall closer to the StartDateTime o VesselIdentification o VoyageInformation o PreArrival3DaysNotification Details o PreArrival24hoursNotification Details	Data relevant to <b>the</b> expected calls of a ship (on the basis of ETA)  The SSN EIS shall first identify all the Ship Calls for the specified vessel with ETAToPortOfCall "in the future" with respect to the StartDateTime set by the data requester. Then, the query shall <b>list</b> <del>the</del> <b>retrieve</b> the ShipCall with ETAToPortOfCall closer to the StartDateTime o VesselIdentification o VoyageInformation o preArrival3DaysNotification Details o PreArrival24hoursNotification Details o <b>HazmatInformation (if available)</b>	Correct query's definition, need to change context of query #1
16	181	Table 1 - 2. MostRecentArrivalOfSelectedShip	-	o VesselIdentification o VoyageInformation o ArrivalNotification Details	o VesselIdentification o VoyageInformation o <b>PreArrival3Days Notification Details</b> o <b>PreArrival24hours Notification Details</b> o ArrivalNotification Details o <b>HazmatInformation (if available)</b>	Correct query's definition
17	182	Table 1 - 3. MostRecentDepartureOfSelectedShip	-	o VesselIdentification o VoyageInformation o DepartureNotification Details	o VesselIdentification o VoyageInformation o <b>PreArrival3Days Notification Details</b>	Correct query's definition

#	Page	Affected part	XML message	Original text	Amended text	Justification
18	183	Table 1- 6. CurrentShipCallsAtEUPort	-		o PreArrival24hours Notification Details	Correct query's definition
					o ArrivalNotification Details	
					o DepartureNotification Details	
					o HazmatInformation (if available)	
19	184	Table 1- 7. CompletedShipCallsAtEUPort	-	o VesselIdentification	o VesselIdentification	Correct query's definition
				o VoyageInformation	o VoyageInformation	
				o ArrivalNotification Details	o PreArrival3Days Notification Details	
					o PreArrival24hoursNotification Details	
20	184	Table 1 - 8. LatestRegisteredShipCallDataOfSpecifiedShip	-		o ArrivalNotification Details	Correct query's definition
				o VesselIdentification	o VesselIdentification	
				o VoyageInformation	o VoyageInformation	
				o PreArrival3Days Notification Details	o PreArrival3Days Notification Details	
20	184	Table 1 - 8. LatestRegisteredShipCallDataOfSpecifiedShip	-	LatestRegisteredShipCallDataOfSpecifiedShip	LatestRegisteredShipCallDataOfSpecifiedShip	Correct query's definition
				o VesselIdentification	o VesselIdentification	
				o VoyageInformation	o VoyageInformation	
				o PreArrival3Days Notification Details	o PreArrival3Days Notification Details	
20	184	Table 1 - 8. LatestRegisteredShipCallDataOfSpecifiedShip	-	o PreArrival24hoursNotificationDetails	o PreArrival24hours Notification Details	Correct query's definition
				o ArrivalNotification Details	o ArrivalNotification Details	
				o DepartureNotification Details	o DepartureNotification Details	
					o HazmatInformation (if available)	

## Critical corrections

#	Page	Affected part	XML message	Original text	Amended text	Justification
1	188	AdditionalSearchCriteria element (overview)	SSN2MS_ShipCall_Req	<b>NEW attribute</b>	[AFTER] ShipCallId attribute [to include <b>NEW attribute</b> GetHazardType, 0-1	To ensure asking the relevant HAZMAT details to the data provider. Annex B of XMLRG to be amended accordingly. Set of rules to be applied in such cases to be included in the relevant part of the XMLRG.
2	189	AdditionalSearchCriteria element (XML message)	SSN2MS_ShipCall_Req	<b>NEW attribute</b>	[AFTER] ShipCallId attribute [to include <b>NEW attribute</b> GetHazardType, 0-1, If GetHazard is quoted, then this attribute should be included (possible values: - HazardTowardPortOfCall - HazardTowardNestPort )	To ensure asking the relevant HAZMAT details to the data provider. Annex B of XMLRG to be amended accordingly. Set of rules to be applied in such cases to be included in the relevant part of the XMLRG.
3	191	AdditionalSearchCriteria element (overview)	MS2SSN_ShipCall_Res	<b>NEW attribute</b>	[AFTER] ShipCallId attribute [to include <b>NEW attribute</b> GetHazardType, 0-1	To ensure answering with the relevant HAZMAT details in case of request. Annex B of XMLRG to be amended accordingly. Set of rules to be applied in such cases to be included in the relevant part of the XMLRG.

#	Page	Affected part	XML message	Original text	Amended text	Justification
4	193	AdditionalSearchCriteria element (XML message)	MS2SSN_ShipCall_Res	<b>NEW attribute</b>	<p>[AFTER] ShipCallId attribute [to include <b>NEW attribute</b>] GetHazardType, 0-1, If GetHazard is quoted, then this attribute should be included (possible values:</p> <ul style="list-style-type: none"> <li>- HazardTowardPortOfCall</li> <li>- HazardTowardNextPort )</li> </ul>	To ensure answering with the relevant HAZMAT details in case of request. Annex B of XMLRG to be amended accordingly. Set of rules to be applied in such cases to be included in the relevant part of the XMLRG.

## NON-Critical corrections

#	Page	Affected part	XML message	Original text	Amended text	Justification
1	89	HazardCargoInformation element (overview)	MS2SSN_PortPlus_Not	<b>ADD attribute</b>	[AFTER] HazardOnBoardYorN attribute [to include attribute] INFShipClass, 0-1	To enhance the provision of HAZMAT summary in case of request
2	90	HazardCargoPOBInformation element (overview)	MS2SSN_PortPlus_Not	<b>ADD attribute</b>	[AFTER] HazardOnBoardYorN attribute [to include attribute] INFShipClass, 0-1	To enhance the provision of HAZMAT summary in case of request
3	92	VesselIdentification element (XML message)	MS2SSN_PortPlus_Not	VesselIdentification element node ("child" to the Notification element) The vessel identification attributes (IMO number, MMSI, Call Sign, ship name) must be checked by NCA against an owned ship reference database	<p>[After]VesselIdentification element node ("child" to the Notification element) The vessel identification attributes (IMO number, MMSI, Call Sign, ship name) must be checked by NCA against an owned ship reference database</p> <p>[to include <b>NEW</b>] Shall the SSN-EIS system receive a PortPlus with an existing ShipCallId but for another vessel, the message will be rejected with StatusCode="InvalidFormat" and StatusMessage="A ShipCallId has already been sent from</p>	To give more flexibility in managing the ship's identity along with the same ship call



#	Page	Affected part	XML message	Original text	Amended text	Justification
4	93	PortOfCall attribute (XML message)	MS2SSN_PortPlus_Not	This attribute indicates the actual port of call, e.g. if the port of Oostende is sending this notification, then this PortOfCall attribute must be the location code of Oostende (BEOST) and not the next port of call after Oostende. [...]	<p>user_id_xyz". The rejection criteria applied upon the ship's identity check are:</p> <p>1. should in the previous notification is quoted the IMO number (regardless of the MMSI number) and in the subsequent message the IMO number is changed;</p> <p>2. should in the previous notification is quoted only the MMSI number (IMO=null) and in the subsequent message MMSI is changed (still IMO=null)</p> <p>[After] This attribute indicates the actual port of call, e.g. if the port of Oostende is sending this notification, then this PortOfCall attribute must be the location code of Oostende (BEOST) and not the next port of call after Oostende [to include NEW] The PortOfCall value notified within a new notification (UpdateStatus="N") must not be changed in any of the update messages (UpdateStatus="U"), unless the updated value appears among the permitted locations for the same notifying Authority</p>	To give more flexibility in managing subsidiary LOCODEs
5	94	HazmatCargoInformation element (XML message)	MS2SSN_PortPlus_Not	<b>ADD attribute</b>	[AFTER] HazmatOnBoardYorN attribute [to include attribute] INFShipClass, 0-1,None	To enhance the provision of HAZMAT summary in case of request
6	96	HazmatCargoPOBInformation element (XML message)	MS2SSN_PortPlus_Not	<b>ADD attribute</b>	[AFTER] HazmatOnBoardYorN attribute [to include attribute] INFShipClass, 0-1,None	To enhance the provision of HAZMAT summary in case of request
7	185	Table 1	-	<b>New Query #12</b>	[AFTER]	Definition of a new

#	Page	Affected part	XML message	Original text	Amended text	Justification
					11.LatestCallInfoAtSpecificPort [to insert NEW] 12.ListExpectedCallsOfSelectedShip (Refer to below for specifications)	query's value, need to change context of query #1
ListExpectedCallsOf SelectedShip						
Value of the GetDetails attribute		Data relevant to expected calls of a ship (on the basis of ETA) The query shall return a confirmation on dangerous goods availability on board as well as the data included in the following specific elements of the PortPlus notification listed by the query: <b>VesselIdentification; VoyageInformation; PreArrival3Days; Notification Details; PreArrival24hours Notification Details</b>				
Information expected in the response message		IMONumber or MMSINumber; StartDateTime; EndDateTime				
Attributes (for accepting) the request message as valid		Values set for Start DateTime – EndDateTime: StartDateTime = " <b>A DateTime set by the requester</b> "; EndDateTime = " <b>StartDateTime</b> " <b>Rules:</b> The SSN EIS shall first identify all the Ship Calls for the specified vessel with ETAtoPortOfCall "in the future" with respect to the StartDateTime set by the data requester. Then, the query shall list the ShipCall with ETAtoPortOfCall closer to the StartDateTime The applicable rules are: [DateTime="SentAt" of the request] <= StartDateTime <= [DateTime="SentAt" of the request" plus 30 Days] Last update of MIN (ETAtoPortOfCall) from pre-arrival notifications to be listed >= [Datetime=" StartDateTime"]				
Query will return results related to these rules						