Frequently Asked Questions (FAQ)

On SafeSeaNet Version 5

Version 1.0

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EMSA

Document History

Version	Date	Changes	Prepared	Approved
1.0	18/08/2021	Initial draft	EMSA	EMSA

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SSN V5

Frequently Asked Questions (FAQ)

This support is provided without prejudice to any formal legal interpretation, and with the sole purpose of assisting and sharing some of the more common technical questions and issues encountered (non-exhaustive)

1.   Commissioning Tests

Q.1.1: When will be possible to run the commissioning tests of national SSN systems for V5?

The SSN V5 was deployed in the training environment on 20 July 2021 and is available to support the commissioning tests.

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Q.1.2: What is the defined period for the commissioning tests?

The period for running the commissioning tests as defined by the HLSG, is from July to December 2021.

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Q.1.3: Where can I find the Commissioning Test Plan?

The Member State Commissioning Test Plan for SSN V5 is available at: http://emsa.europa.eu/ssn-main/documents/item/2287-ssn-member-state-commissioning-test-plan-v3-0.html

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Q.1.4: Where can I find the XML Messaging Reference Guide and the XSD files?

The XML RG is available at: http://emsa.europa.eu/ssn-main/documents/item/4331-ssn-xml-messaging-reference-guide-v5-00.html. The XSD can be found at: https://extranet.emsa.europa.eu/document-repository/protected-documents
Note: the file is password protected. Access to the XSD requires a login/password that is available by the NCA contact person. Please contact the NCA to obtain this document.

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Q.1.5: Where questions on SSN v5 Business Rules and Processes can be submitted?

They may be sent to the EMSA MSS (MaritimeSupportServices@emsa.europa.eu).

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Q.1.6: Are wildcard certificates issued by GlobalSign trusted for SSN purposes?

System-to-system communication relating to SSN is based solely on certificates issued by EMSA. EMSA digital certificates may be requested using this online form: http://www.emsa.europa.eu/digital-certificate-request-form.html

An on-line course to learn about EMSA's Public Key Infrastructure services and how to request, renew and revoke digital certificates is available via the EMSA eLearning tool (MaKCs Home), which is accessible via the EMSA portal.

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Q.1.7: Is the SSN v5 training environment operational? Is it possible to create user access for a software partner? What are the necessary steps for doing this?

All of the existing users and accesses are valid. It is possible to connect to the SSN training web interface via https://portal-training.emsa.europa.eu/home In order to obtain a new account or update an existing system account to SSN v5, the SSN NCA should contact the EMSA MSS MaritimeSupportServices@emsa.europa.eu

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Q.A.8: Where is the list of the SSN v5 validation rules that will be applied to the messages sent by the Member States to SSN?

The validation rules applied by SSN Version 5 are described in the XML Messaging Reference Guide. For each message, the message description (format) is provided followed by the applicable business rules. Some messages have general business rules that are applicable to whole messages, as well as specific business rules applicable to attributes.

2.   Transition period

Q.2.1: How does SSN handle the transition from V4 to V5? Is SSN able to handle/receive PortPlus V4 and V5 messages for the same ship call? Is it possible to send a PortPlus update message in the V5 format while one or more previous PortPlus messages were sent in the V4 format?

SSN Central will be capable of receiving both V4 and V5 PortPlus notifications. SSN Central will accept only one version of PortPlus notifications per system user. For Member States providing PortPlus notifications in both V4 and V5 formats during the transition period, two system user accounts need to be created and Member States must ensure that data reported for the same ship call (same ShipCallID) is reported using the same version V4 or V5.

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Q.2.2: When switching over from V4 to V5 for all notifications, how the ship calls notified in V4 but not closed at the moment of the switch over from V4 to V5, should be handled?

The Central SSN will communicate only in one version (v4 or v5) with each system user account. This will be a configurable parameter in Central SSN. As from the moment a national system does the switch over to V5, the new configuration will be updated and Central SSN will communicate only in V5 with that national SSN system.

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Q.2.3: How does SSN determine the version used to request messages (SSN2MS_ShipCall_Req) to a Member State during the transition period?

We assume that SSN does not send requests in V4 for ship calls which have been already reported to SSN using PortPlus V5 messages. Is this assumption correct?

Correct, as the version configuration will be associated with the system user account. The Central SSN will communicate only in one version (v4 or v5) with each system user account.

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Q.2.4: Will MSs be able to choose whether they want to receive SSN v4 or SSN v5 SSN2MS_ShipCall_Req messages, and can they respond with SSN2MS_ShipCall_Res messages in a different version than the received SSN2MS_ShipCall_Req?

Alternatively, does everything depend on the version in which the latest PortPlus notification for the same ship call was received by the central SSN system?

Central SSN will be capable of receiving and treating both V4 and V5 ShipCall requests (MS2SSN_ShipCall_Req). Central SSN will provide two sets of distinct URLs for receiving ShipCall requests: one set for V4 requests and the other for V5 requests. Each national SSN system user account will be configured to only in one version (v4 or v5).

Central SSN will request the details (SSN2MS_ShipCall_Req) to the Data Provider using the SSN version (v4 or v5) configured to each national SSN system user account. The Data Provider will have to provide the response (MS2SSN_ShipCall_Res) in the same version as the request received from Central SSN (SSN2MS_ShipCall_Req).

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Q.2.5: Are there any changes needed in national SSN systems following the deployment of SSN V5 in production?

Following the deployment of SSN V5 in production (planned for December 2021), both v5 and v4 messages will be accepted by the central SSN system. However, during the transition period there will be some limitations due to technical constraints. The table below summarises the SSN version 5 transition period:

Messages	System interface (XML and SOAP)	Web Textual Interface
PortPlus notification	PortPlus V5 PortPlus V4	N.A.
ShipCall request	ShipCall Request V5 with Details V5, and V4 without Waste ShipCall Request V4 with Details V4, and V5 without Waste and Persons	ShipCall Request V5 with Details V5, and V4 including Waste with some restrictions
IncidentDetail notification	IncidentDetail V5 IncidentDetail V4	IncidentDetail V5
IncidentReport request and Distributed	IncidentReport V5 with Details V5 and V4 in PDF IncidentReport V4 with Details V4 and V5 in PDF	IncidentReport Request V5 with Details V5 and V4 in PDF
Exemption notification	Exemption V5 Exemption V4	Exemption V5
Exemption request	Exemption V5 with Details V5 and V4	Exemption V5 with Details V5 and V4
Ship MRS notification	Ship MRS V5 Ship MRS V4	Ship MRS V5
Ship MRS request	Ship MRS V5 with Details V5 and V4	Ship MRS V5 with Details V5 and V4

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Q.2.6: Will it be possible for national SSN systems to provide data using the format of either SSN V4 or SSN V5 (i.e. port A still providing V4 data and port B already in V5)?

For Member States providing PortPlus notifications in both V4 and V5 formats during the transition period, two system user accounts need to be created and Member States must ensure that data reported for the same ship call (same ShipCallID) is reported using the same version V4 or V5.

SSN Central will provide two sets of distinct URLs for receiving PortPlus notifications: one for V4 notifications (the current endpoints) and the other for V5 notifications (new endpoints).

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Q.2.7: How long will SSN V4 messages be supported?

It is expected that all national SSN systems will be migrated to V5 by December 2023. The date when V4 messages will be phased out will be decided by the HLSG.

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Q.2.8: The "CallPurposeCode is updated with additional codes" in V5: what codes are added?

The codes from the latest updated version of EDIFACT code 8025 (available at https://service.unece.org/trade/untdid/d19b/tred/tred8025.htm)

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Q.2.9: What will happen with the FirstName and LastName of the CSO in the security details if they are longer than 70 characters (because the notification was done in SSN V5 format), and it has to be translated to SSN V4 format?

The names will be trimmed.

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Q.2.10: What will happen with exemptions of the new types "CrewAndPax" and "CrewAndPaxDerogation" in SSN2MS_ShipCall_Res in SSN v4 format, and with the exemptions of type "Waste" in the responses in SSN v5 format?

The new types "CrewAndPax" and "CrewAndPaxDerogation" will not be included in V4 SSN2MS_ShipCall_Res.

Exemptions of type "waste" are from V3, this will be decommissioned once V5 is deployed in the Production. The transition is only for V4.

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Q.2.11: Distributed IncidentDetails notifications, "When the national SSN system is V5, SSN will distribute the […] IncidentDetails information provided in V4 format with the following limitation: IncidentDetails details in V4 will be converted to a PDF file and provided as attached document in Base64Details."

This has a serious impact for all authorities that want to receive the incidents via S2S from SSN: as long as not all MSs use SSN V5 for notifying incidents to SSN, incidents reported in V4 format will be forwarded via S2S in a non-structured format pdf, with a consequence that the authority that receives this information will not receive structured information. Is there an alternative solution for this?

The changes in the XML structure of the Incident reports are significant. In addition, many of the MS use the web interface to report the Incidents and these will be already structured in V5 format. Please see the numbers of incidents reported in XML and via the web in the SSN DQ report.

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Q.2.12: For the Exemptions, "SSN Central will be capable of receiving only V5 Exemptions requests. During the transition period, Member States still in V4 should use the Web Textual Interface." Does this constraint apply for the exemption's information in the ShipCall Request/Response?

No, only Exemption_request messages via S2S.

3. Waste reporting

Q.3.1: In the Waste Notification of the PortPlus message, the 'NextPortOfDelivery' is added as an optional field. The business rules do not specify when the field is included in the notification. In which cases the field is mandatory or not?

This attribute is required by Annex 2 of the new PRF Directive (refers to the NSW Data Mapping report). As such, this field should be reported together with the provision of the Waste Notification.

This field is not mandatory in order to avoid rejections of the full PortPlus notification.

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Q.3.2: The waste details of the PortPlus notification already contain a field 'PortDeliveryRemainingWaste' for each waste item. What is the difference between 'PortDeliveryRemainingWaste' and 'NextPortOfDelivery'? Isn't the latter redundant?

SSN follows the requirements of the Annex 2 of the new PRF Directive (Directive (EU) 2019/883) where both items are required.

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Q.3.3: The business rule that the field 'PortDeliveryRemainingWaste' in the waste details of the PortPlus notification should be provided if WasteDeliveryStatus =" Some" or "None" was removed.

Does this imply that the field is always optional, or there is still a recommendation to include the field when not all waste of the corresponding waste type will be disposed of at the port of call (quantity retained on board > 0)?

The business rule was removed in SSN v5 because the WasteDeliveryStatus field was removed from the Annex 2 of the new PRF Directive. Following the approach to avoid rejections by technically enforcing mandatory data fields, 'PortDeliveryRemainingWaste' should be provided in the Waste Notification when not all waste of the corresponding waste type will be disposed of at the port of call. However, this will be assessed in the Data Quality reports and by the PRF inspections.

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Q.3.4: The Waste message business rule 8 specifies that "…the waste related fields shall always be filled in even if there is no quantity to be reported. In this case, the quantity shall be reported with the value "0".".

Should this be interpreted as an "every waste notification needs to contain information on all waste types listed in Annex B of the XML Ref. Guide, even if that waste type is not applicable for the ship or ship call", or rather "for every applicable waste type, all quantities should be provided"?

There were no changes made to this BR from the previous Waste Business Rules. But, as this question is on the interpretation of the legal requirements, it must be addressed to DG MOVE.

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Q.3.5: In the "NSW Data Mapping Report-v1.11" the ship type (relevant code) is defined as follows: "Codes the ship type according to UNECE R28" which is in line with the definition of ship types contained in XML Messaging Ref. Guide v5.00. Although, in reference to WASTE data (NSW Data Mapping), ship types are defined as..."not according to UNECE 28 (based on PSC types)".

During the process of drafting the Waste Business Rules this issue was identified. The experts and the Commission concluded that the ship type should be reported only once to avoid duplication.

As the UNECE R28 ship type codes were already implemented in the NSW and in SSN, it was agreed that the ship types for the purpose of the Advance Waste Notification and Receipt would also be reported using UNECE R28 ship type codes. EMSA will propose to add this clarification under "Notes" to the NSW Data Mapping Report.

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Q.3.6: The chapter 8 "Information on port reception facilities" of the Waste Business Rules describe a lot of port reception facility information that must be available through SSN and, as described in BR 12 should be provided in a structured format. What does that mean?

Is it the national SSN that must contain this information, or is it the central system (EMSA webpage) that will be developed to store and present these data? There are a lot of references to GISIS - shall the member state update both GISIS and SSN with the same information or is it sufficient to only update e.g. GISIS.

The information on the port reception facilities that must be available through SSN is aligned with the information that is currently reported in GISIS PRF module. You may access GISIS web portal to see the information (the information is available upon registration).

SSN will be upgraded to store this data (in fact, this will be stored in the Central Locations database - CLD). In order to avoid duplication, COM is in contact with IMO GISIS to establish an automatic link to report the information from SSN to IMO GISIS.

Following this development, it will be sufficient to only update SSN and the information will be automatically transmitted to GISIS. However, please note that this is still being discussed.

4.   Exemptions reporting

Q.4.1: Can an exemption notification contain an exempted port (or port facility) outside the EU?

The exempted ports (or port facilities) reported in the exemption notification ("ExemptionAppliesTo" element) can only be for the same country as the reporting authority. In the "Route" element, any port may be reported.

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Q.4.2: Should ports to which the exemption applies also be included in the "Route" element, or should the route only contain ports of the scheduled service to which the exemption does not apply?

The "Route" element should include all ports of the scheduled service (whether exempted or not).

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Q.4.3: For the contact 24/7 the Contact Name, LoCode, Phone, Fax and e-mail have to be registered. What is the purpose of contact 24/7 details used in SSN, in MS2SSN_Exemption_Not message?

E.g. when a SSN user is requesting the waste notification details, and gets feedback that the waste notification detailed information is not available in SSN because an exemption was granted from the waste notification - are these contacts24/7 details used to contact the authority that issued the exemption for

questions about the exemption itself, or to contact the agent/shipping company where the waste notification information can be obtained 24/7.

The contact 24/7 are the contact details from where an additional information may be requested regarding the exemption, which may also require to contact the company to obtain the detailed information (e.g. Hazmat details requested following an accident). Each Member State may have different procedures at national level to contact the company and to make this information available upon request. Preferably this should be centralised by the NCA 24/7.

However, regarding the Waste exemptions, Directive EU 2019/883 does not require the company to establish a procedure/internal system to provide the information 24/7. This has been clarified in the SSN V5 XML Ref Guide.

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Q.4.4: There is a need to clarify the meaning of the contact24/7 for all types of exemptions, including:

- *What is the meaning of the contact24/7 details in case of an exemption from waste delivery?*
- *What is the meaning of the contact24/7 details in case of an exemption from waste fees?*
- *What is the meaning of the contact24/7 details in case of an exemption from ISPS pre-arrival notification?*

When will this be detailed in the SSN common operational procedures document and SSN XML Ref. guide?

The clarification on the meaning of contact 24/7 for the different exemption types should be detailed in the SSN Common Operational Procedures document (with a reference to it in the XML Reference Guide). EMSA will propose a planning to review/update the SSN operational documentation in line with SSN v5.

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Q.4.5: Two different types of exemptions exist: an exemption to provide the list of crew members and passengers (but the numbers should still be reported) and an exemption to provide the number of crew members and passengers on board. In the SSN XML Ref. Guide only one type of exemptions was added.

Is this because the information on exemptions of only the list of crew and passengers should not be exchanged through SSN? How should the difference between the two types of exemptions be made?

The exemption to report the number of persons on board (Article 4 (2) of Dir. 98/41/EC) was discussed when drafting the Business Rules. The Commission has clarified that this exemption is only applicable to the reporting of number of persons on board to the NSW but not via AIS. If this option to exempt reporting the number of persons on board to the NSW is implemented, the ship must report this information using the AIS system.

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Q.4.6: Regarding exemptions granted for small ports (in BR 24 of Waste Business rules) – will it also be possible to register centrally as the rest of the exemptions?

Regarding BR 24, that is correct. SSN v5 will include a development to allow the registration of exemptions granted for small non-commercial ports and small ports with unmanned facilities. This functionality will also include the possibility to upload a file (e.g. csv) with the information.

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Q.4.7: At the moment different types of waste exemptions (payment/delivery/notification) need to be registered in SSN one-by-one (per article). We would like to do a proposal to request a change in the registration tool in SSN making it possible to fill-in the waste form once and to select for which articles the vessel will be exempted.

For example: the exemption is applicable for vessel IMO 9402653 on a specific route. To register this exemption in SSN we need to fill in the SSN form twice (payment/notification) with exactly the same

information. With our proposal it would be possible to register the exemption in SSN once and select for which articles it would be applicable.

Regarding your proposal to modify the way exemptions are registered in SSN, to make it possible to report several exemption types in one go, this proposal is included in the package for SSN v5 (see SSN v5 SRS, section 4.3 Other Changes).

Due to the extended changes required for SSN v5, this will be split in several releases. EMSA plans to have this change not in the first release but only for next year.

For the moment, you may use the functionality to "Reuse Existing" to facilitate the reporting of multiple exemptions for the same scheduled service.

5.   Security reporting

Q.5.1: For most contact details in the SSN messages FirstName and LastName have been replaced with a ContactName. The CSO in the security details still has fields FirstName and LastName.

Is this because the function is assigned to a person and the information exchange requires the full name of the person?

Correct, the CSO function is assigned to a person.

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Q.5.2: The SSN Security Guidelines impose that all personal data in SSN systems should be encrypted. Does this apply to the CSO contact details?

Yes, this information will be encrypted in the central SSN database.

6.   Persons on Board reporting

Q.6.1: Business rule 8c for information on persons sailing on board the passenger ships states that the information on the number of crew members and passengers should be reported before departure of the ship. According to introduction on the PortPlus notification on page 73 of the XML Ref. Guide the information should be provided upon departure.

We suppose that the difference in wording relates to different actions (reporting by the declarant vs. providing the notification message to SSN).

Does the same timeframe as for other existing reporting obligations related to the departure (POB towards next port, DPG towards next port, …) will be taken into account in Central SSN or in data quality checks performed by MSS?

The requirements from the legal text prevails over the SSN technical specifications. For consistency, the wording in page 73 of the XML Ref. Guide will be amended to align with the wording from Directive 98/41/EC.

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Q.6.2: In the national single windows, most information on persons sailing on board (passenger) ships is already available as the information is already provided for border control. However, the specifications related to border control foresee the reporting of crew, passengers, and stowaways (numbers and list).

How should be dealt with stowaways in the reporting of persons sailing on board passenger ships to SSN? Especially considering that in the MSW all fields regarding stowaways are made optional since the information might not be available.

The reporting of stowaways was discussed when drafting the Business Rules. For search and rescue purposes all persons on board 'known' at the time of the reporting need to be included. If additional information becomes 'known' during the voyage, the report should be updated.

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Q.6.3: Are there any business rules or legal restrictions on the provision of the number of crew members and passengers to SSN? Would it be allowed to provide number of crew and passengers for all ship calls (also non-passenger ships), at the same time with the total number of persons on board (provided in the PreArrival2424HoursNotificationDetails and DepartureNotificationDetails)?

There are no technical restrictions for the provision of the number of crew members and passengers to SSN for other ship types (not passenger ships). Also, as the numbers are not considered as personal data, there is no legal restriction.

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Q.6.4: Will the query "SelectedShipCall" be supported together with parameter "GetCrewAndPax"? The query allows to request all currently existing types of detailed information in SSN, but the new parameter "GetCrewAndPax" was not added in "Table 4 – Description of queries supported by the MS2SSN_ShipCall_Req message" at page 177. Was this just forgotten or is intentional (because the personal data should only be requested with query "GetActiveCrewAndPaxForSelectedShip")?

This query will not support the parameter "GetCrewAndPax". This might be included in future releases if proposed by the SSN Group.

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Q.6.5: In the elements to provide detailed information on the persons on board (elements "CrewMember" and "Passenger") in the MS2SSN_ShipCall_Res message, most attributes ("LastName", "FirstName", "Nationality", "DateOfBirth" and "Gender") are mandatory. However, in case of stowaways, it is likely that not all this information is available.

How should the details on stowaways be provided to Central SSN if some but not all information is available?

Regarding the reporting of stowaways for the elements "CrewAndPaxNotificationOnArrival" and "CrewAndPaxNotificationOnDeparture, please note that this requirement originates from Directive 98/41/EC and the purpose is to identify the persons on board passenger vessels in the event of a search and rescue operation. So, there is no distinction if the person on board is crew, passenger, inspector, visitor, or stowaway.

During the drafting of the Business Rules this question was raised, and the experts concluded that if the information on stowaways on board the vessel is known at the time of the reporting this should be reflected as passenger on board, even if the full details are not available (in this case, just report as not available for the mandatory elements).

Please note that for the reporting for Border Control purposes, the requirements for stowaways may differ.

7.   Incidents reporting

Q.7.1: Regarding the meaning of the contact details that are provided when notifying an incident in SSN - should these be 24/7 contact details of an authority that is operationally responsible for the follow up of the incident? If an incident is reported using the SSN TI, then the contact details of the reporting authority are copied from the COD, and not the 24/7 contact details. Can the meaning of the contact details be explained in the relevant SSN documents (SSN TI user interface document, SSN XML ref guide, SSN IR guidelines)?

Correct, these should be the contact details (24/7 if available) of the authority that is operationally responsible for the follow up of the incident.

EMSA will propose a planning to review/update the SSN operational documentation in line with SSN v5 at the SSN meeting, and the proposal may be included in the revision.

8.   Other issues

Q.8.1: An extra value has been added to the enum of attribute "UnitOfMeasurement": "L" (liter). But the XML Ref. Guide does not indicate where it could be used. The attribute is used with several quantities and some have business rules on what units of measurement should be used, but not all of them:

•   *WasteDetails/WasteReceipt: "Only M3 is acceptable"*
•   *HazmatDetails(PortPlus)/DGDetails (IR): no business rules*
•   *BunkerInformation: "Use "TNE" or "M3""*

It seems the unit is added for DPG details.

Should it only be used in IR messages? Is the unit also to be used in DPG details in MS2SSN_ShipCall_Res messages? And, is this due to any change in business rules or guidelines?

"L" (liter) was added following an update to the NSW Data Mapping report v1.8 which is aligned with the latest FAL forms published by the IMO. The SSN implementation was planned for the next major release, which was v5. According to the revised Data mapping report, dangerous goods' quantities may be reported in litres in addition to kilograms.

In SSN, the "UnitOfMeasurement" is used for several fields. There are some with specific business rules (e.g. Waste quantities and Bunkers). For those without the business rules associated, any type may be used in UnitOfMeasurement.

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Q.8.2: According to the table in annex A "XML attributes definitions", both attributes 'Flag' and 'Nationality' contain Alpa-2 codes in accordance with the standard ISO 3166-1. However, the type of attribute 'Nationality' will be text(2) and the type of attribute 'Flag' is still indicated as ENUM (hence the list of country codes should still be included in the XSD).

Is that correct? Or, will the datatype of attribute 'Flag' be updated in de XSD?

Even though, in the XML Ref Guide 'Flag' is ENUM, in the SSN v4 schema this is already a string (and the country codes are not included in the XSD):

```
</xsd:simpleType>
        <!-- 2 letter country code (according to ISO 3166) of the flag of the ship -->
        <xsd:simpleType name="FlagType">
                <xsd:restriction base="xsd:string">
                        <xsd:pattern value="[a-zA-Z]{2}"/>
                </xsd:restriction>
        </xsd:simpleType>
```

Q.8.3: In accordance with requirement 19, personal data should be stored encrypted.

Does this also apply for personal data in xml-messages, temporary stored by a message broker to be able to deliver the message to subscribed systems? How long can the messages be stored by that message broker? Can these stored messages be used for debug/log purposes (by authorized users)?

Personal data is indicated in point 18. Any component of the national SSN system storing such information must do it in compliance with the security guidelines, therefore encrypted. Data retention rules apply to all components of the national SSN system. As indicated in point 27, the logs should not contain the personal data exchanged, but aggregated values or a hash of the actual information.

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Q.8.4: How the storage of xml-messages containing personal data will be implemented in Central SSN and how this will affect the Search Logs section available in the Management Console of SSN-TI?

EMSA will apply the guidelines and therefore hash personal data in the logs, e.g. content of elements "CSO", "CrewInformation" and "PassengerInformation".

In the Search logs users will have access to the messages exchanged, but with the contents hashed. Therefore, in SSN-TI logs console they will not be able to see the contents of the elements with personal data.