

# Central Location Database (CLD) System Interface Guide

Document version: 1.07

Document release date: 05/09/2017

SSN XSD version: 1.2

SSN XSD release date: 05/09/2017

Reference document of the IFCD defined in Annex III, paragraph 2.3 of Directive 2002/59/EC as amended by Directive 2009/17/EC establishing a community vessel traffic monitoring and Information system

## TABLE OF CONTENTS

<b>1 INTRODUCTION .....</b>	<b>4</b>
1.1 DOCUMENT OVERVIEW.....	4
1.2 SCOPE .....	4
1.3 APPLICABLE SSN RELEASE .....	4
<b>2 SYSTEM INTERFACES .....</b>	<b>5</b>
2.1 SERVICES OVERVIEW .....	5
2.2 MESSAGE FLOWS .....	5
2.2.1 Request/ Response .....	5
2.2.2 Announcement .....	7
2.2.3 Notification .....	8
2.3 DATA EXCHANGE MECHANISM - CLARIFICATIONS.....	8
2.3.1 Data Provider Interface .....	9
2.3.2 Data Requestor Interface.....	9
2.3.3 Data Subscriber Interface .....	9
<b>3 MESSAGES STRUCTURES AND BUSINESS RULES .....</b>	<b>10</b>
3.1 REQUEST/RESPONSE MECHANISM.....	10
3.1.1 Introduction.....	10
3.1.2 Message flow .....	10
3.1.3 MS2SSN_Location_Req message .....	10
3.1.4 SSN2MS_Location_Res message .....	12
3.2 GET LOCATION LOGS FROM SSN.....	16
3.2.1 Introduction.....	16
3.2.2 Message flow .....	16
3.2.3 MS2SSN_LocationLog_Req message .....	16
3.2.4 SSN2MS_LocationLog_Res message.....	18
3.3 ANNOUNCEMENT MECHANISM .....	22
3.3.1 Introduction.....	22
3.3.2 Message flow .....	23
3.3.3 MS2SSN_LocationAnn_Req message.....	23
3.3.4 SSN2MS_LocationAnn_Res message .....	25
3.4 NOTIFICATION MECHANISM .....	30
3.4.1 Introduction.....	30
3.4.2 Message flow .....	30
3.4.3 MS2SSN_Location_Not message.....	30
3.5 SSN RECEIPT MESSAGE.....	33
3.5.1 Introduction.....	33
3.5.2 Message flow .....	34
3.5.3 SSN_Receipt.xml message.....	34
3.6 STATUS CODES AND STATUS MESSAGES .....	36
3.6.1 Introduction.....	36
3.6.2 Status codes .....	36
3.6.3 Status messages .....	36
<b>ANNEX A - DESCRIPTION OF SSN LOCATION WEB-SERVICE .....</b>	<b>37</b>
<b>ANNEX B – ATTRIBUTES AND SIMPLE TYPE DEFINITIONS .....</b>	<b>42</b>

## ABBREVIATIONS AND ACRONYMS

Abbreviation	Definition
ACK	Acknowledged
AIS	Automatic Identification Systems
CLD	Central Location Database
EMSA	European Maritime Safety Agency
ES	External System
MS2SSN	Used to indicate an External System as the origin and SSN as the recipient of a message.
EU	European Union
GISIS	Global Integrated Shipping Information System (database maintained by IMO)
IMO	International Maritime Organisation
ITU	International Telecommunications Commission
MMSI	Maritime Mobile Service Identity
MS	Member State
N/A	Not Applicable or Not Available
NACK	Not Acknowledged
OLD	Operational Location Database (SSN registry)
SSN	SafeSeaNet
SSN2MS	Used to indicate SSN as the origin and an External System as the recipient of a message.
URL	Unified Resource Locator
WADL	<a href="#">Web Application Description Language</a> . It describes XML over HTTP interfaces
WSDL	Web Service Definition Language
XML	eXtensible Markup Language

## **1 INTRODUCTION**

---

### **1.1 Document Overview**

This document describes the system-to-system interface of the Central Location Database (CLD). It serves as a reference for all technical aspects related to this service.

### **1.2 Scope**

This document provides a detailed description of the system interface between external applications and CLD, which aims at exchanging notifications and requests for details concerning locations' information registered in CLD. The system interface uses the following messages:

- MS2SSN\_Location\_Not
- MS2SSN\_Location\_Req
- SSN2MS\_Location\_Res
- MS2SSN\_LocationAnn\_Req
- SSN2MS\_LocationAnn\_Res
- MS2SSN\_LocationLog\_Req
- SSN2MS\_LocationLog\_Res
- SSN\_Receipt

### **1.3 Applicable SSN release**

This document is compliant with SSN version 3.5.

## 2 SYSTEM INTERFACES

## 2.1 Services Overview

The Central Location Database – CLD is a common service hosted by EMSA SSN application and available to all Member State applications and other EMSA applications (identified in this document as "External Systems ") on a voluntary basis.

The CLD includes information on locations (including all UN/LOCODEs as well as SSN specific locations) and on port facilities stemming from the IMO Maritime Security module of GISIS.

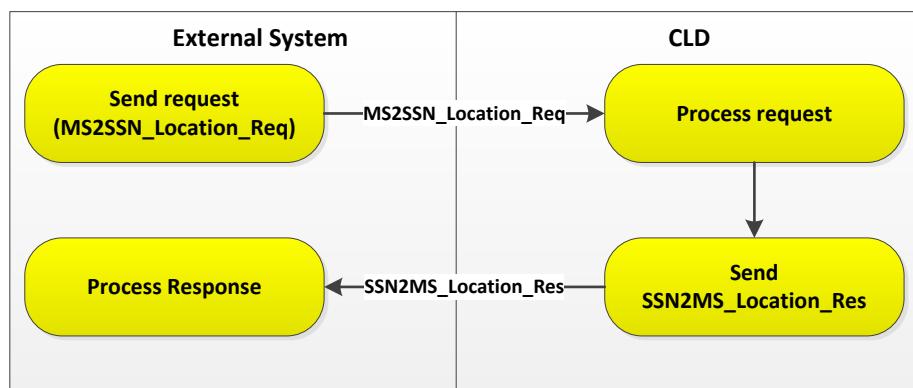
The CLD information is made available to External Systems, which may use it for cross-checking with similar data stored within their databases. For this purpose CLD offers the following services:

- **Request/response mechanism:** to request locations details using different criterions (e.g. country of the Location, name of the location, application using it). The request/ response mechanism can also be used for retrieving a journal of changes of individual location records.
  - **Location data announcement ("push"):** This service is used by the CLD to inform External Systems which have subscribed to the service of creation of new Locations or changes of existing Locations.
  - **Location notification:** External Systems may use this service to notify CLD of new locations or of updates of locations. Note: This service is included in the CLD system interface definition but is not available in the present release.

## 2.2 Message flows

## 2.2.1 Request/ Response

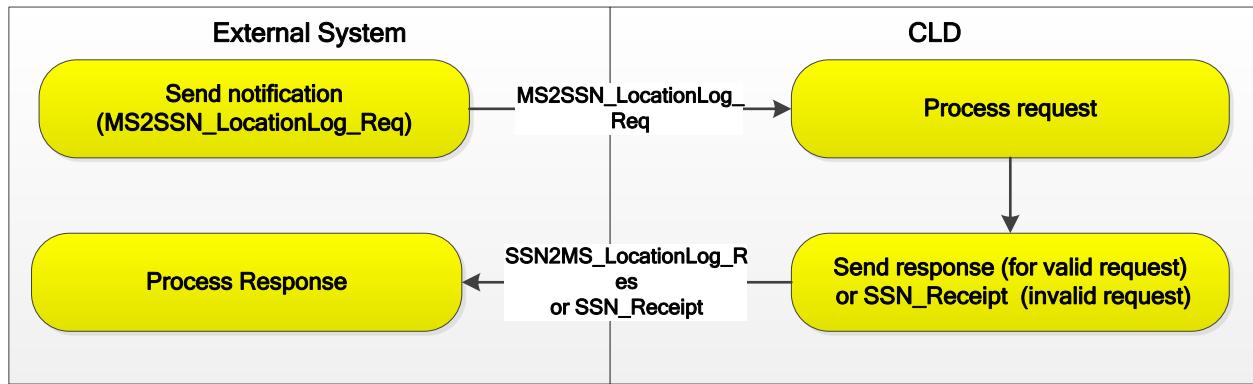
The request/response mechanism for Location data involves the following flow of messages:



**Figure 1:** Message flow – Request/ Response

It allows retrieving a list of locations or a single location.

The process flow also applies to the **logs retrieval** service as depicted below.

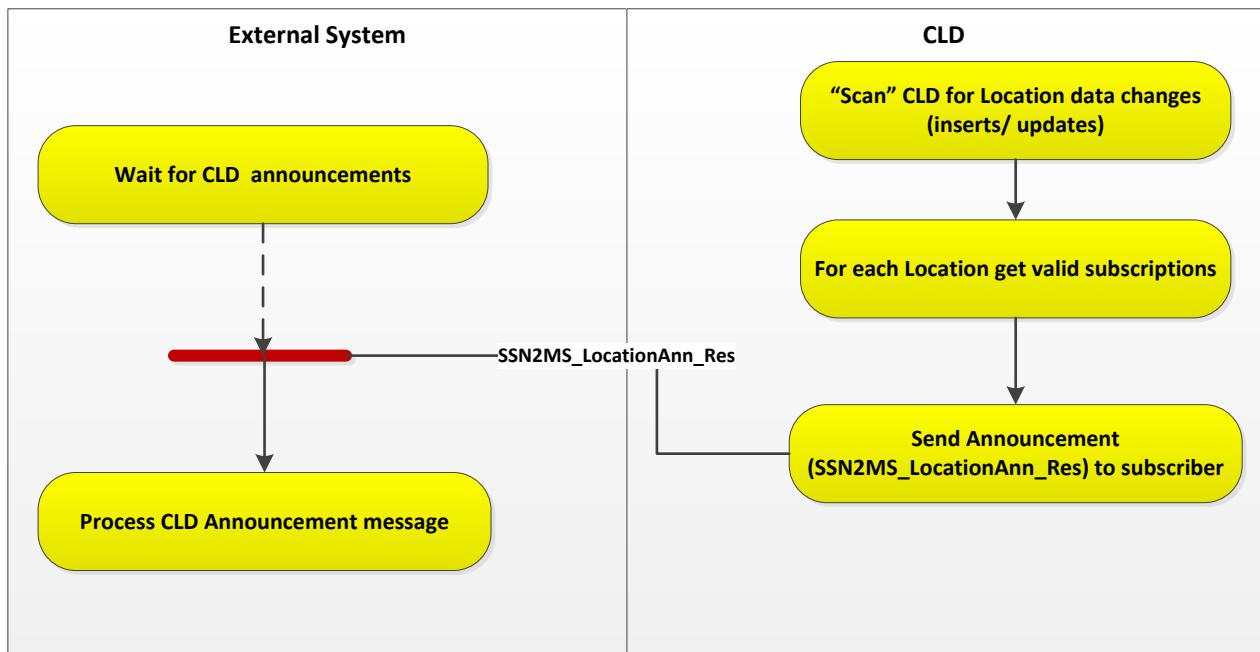
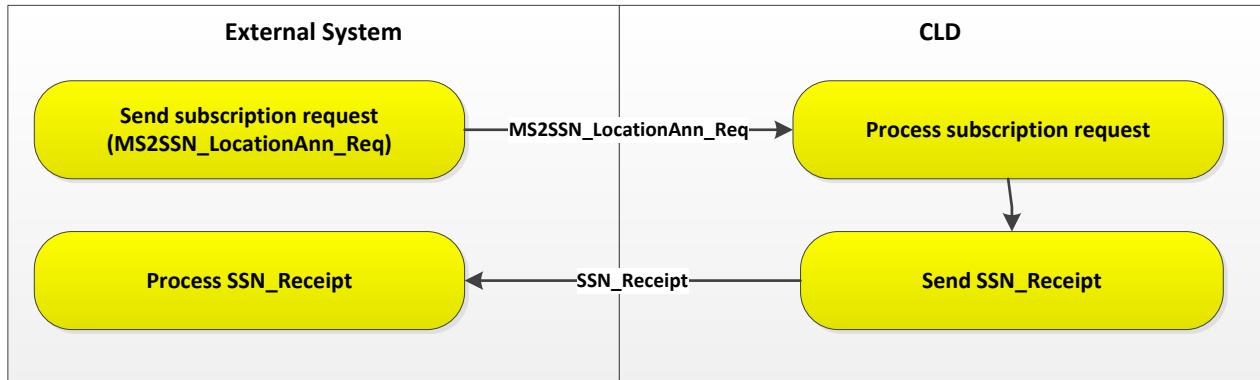
**Figure 2:** Message flow – Request/ Response for history of changes for a location in CLD

The message exchange flow is described in the following table.

Step	Action
1	The external system ( <i>data requestor</i> ) prepares a <b>MS2SSN_&lt;SSN_Tx_Type&gt;_Req</b> message corresponding to the type of the information request and sends it to SafeSeaNet (CLD).
2	CLD logs and validates the received <b>MS2SSN_&lt;SSN_Tx_Type&gt;_Req</b> message. If the <b>MS2SSN_&lt;SSN_Tx_Type&gt;_Req</b> message is not well-formatted (not XML compliant) or not valid (not compliant to corresponding XSD), a <b>SSN_Receipt</b> message is sent synchronously with the error message generated by the parser. If well-formatted (XML compliant) or valid (compliant to corresponding XSD and applicable business rules) the CLD prepares a <b>SSN2MS_&lt;SSN_Tx_Type&gt;_Res</b> response message and sends it synchronously. The content of the response will comply with the criteria set in the request message. If any problem occurs during the processing of the request, the CLD sends back (synchronously) the <b>SSN2MS_&lt;SSN_Tx_Type&gt;_Res</b> message with a negative status code.
3	The external system should log and validate the received message and process it.

## 2.2.2 Announcement

The announcement mechanism involves a subscription request message flow and announcements message flow as follows:



**Figure 3:** Message flows – Subscription for CLD data and CLD data announcement

The message exchange flow is shown in the following table.

Step	Action
1	A <b>MS2SSN_LocationAnn_Req</b> message is sent by the external system to CLD to to <ul style="list-style-type: none"> <li>➤ subscribe to the location announcement (data “push”) service or</li> <li>➤ cancel an existing subscription.</li> <li>➤ The message provides the subscription’s criteria and time period (start and end date).</li> </ul> CLD logs and validates the received message. If well-formatted (XML compliant) or valid (compliant to corresponding XSD), a <b>SSN_Receipt</b> message with StatusCode='OK' is sent synchronously.
2	A scan task regularly “checks” CLD for location data modifications (insertions and updates).
3	For each modification, the CLD will check and retrieve the valid subscriptions.
4	A <b>SSN2MS_LocationAnn_Res</b> message is created with the inserted or modified location information and submitted to the subscriptions endpoint.
5	A JMS Queue is used for redelivery purposes in case of unavailability.
6	Upon receipt of the <b>SSN2MS_LocationAnn_Res</b> message, the external system should log and process it.

### 2.2.3 Notification

The Notification mechanism involves the following flow of messages:

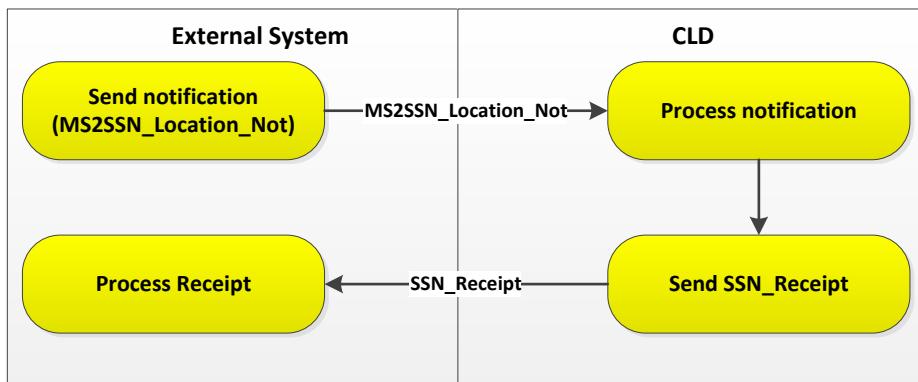


Figure 4: Message flows – Notification

## 2.3 Data exchange mechanism - clarifications

**Note:** This section aims at clarifying further the content of CLD wsdl provided in Appendix A.

### 2.3.1 Data Provider Interface

Both ends act as nodes capable of processing SOAP 1.1 messages (over HTTP/s). The message types used are as follows:

- **MS2SSN\_Location\_Not**
- **SSN\_Receipt** (common for all the SSN messages)

For every notification, a synchronous one-way message connection is established to the SSN-EIS SOAP node.

### 2.3.2 Data Requestor Interface

Both ends act as nodes capable of processing SOAP 1.1 messages (over HTTP/s). The message types used are as follows:

- **MS2SSN\_Location\_Req**
- **SSN2MS\_Location\_Res**
- **MS2SSN\_LocationLog\_Req**
- **SSN2MS\_LocationLog\_Res**
- **SSN\_Receipt** (common for all the SSN messages)

For every request-response communication, a synchronous, two-way connection is established between each SOAP node.

### 2.3.3 Data Subscriber Interface

Both ends act as nodes capable of processing SOAP 1.1 messages (over HTTP/s). The message types used are as follows:

- **MS2SSN\_LocationAnn\_Req**
- **SSN2MS\_LocationAnn\_Res**
- **SSN\_Receipt** (common for all the SSN messages)

For every request-response communication, a synchronous, two-way connection is established between each SOAP node.

## 3 MESSAGES STRUCTURES AND BUSINESS RULES

### 3.1 Request/Response mechanism

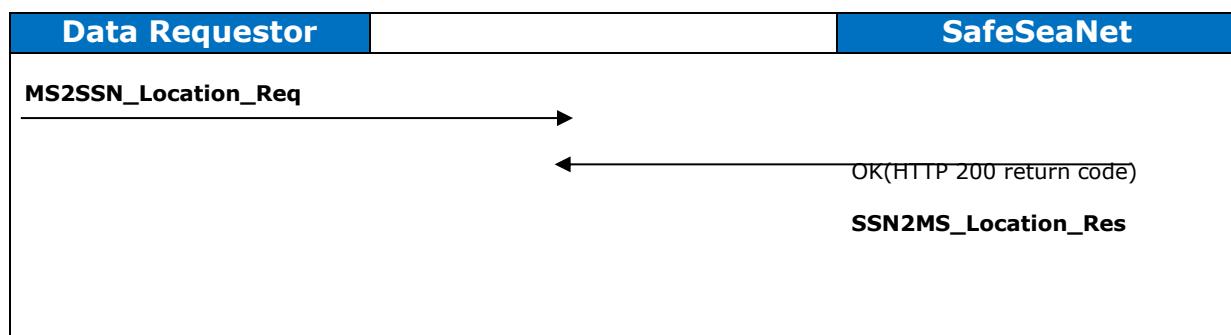
#### 3.1.1 Introduction

The Request/Respons mechanism is meant to External Systems to request the content of location records based on different criterions.

This section describes the different XML messages provided for this transaction.

#### 3.1.2 Message flow

The following figure outlines the expected synchronous flow of XML messages related to this transaction.



In accordance with the applicable wsdl (refer to Annex A), the request (QueryOperation) operation is provided by SSN (SSNRole). It receives **MS2SSN\_Location\_Req** requests from data requestors and replies with **SSN2MS\_Location\_Res** responses.

#### 3.1.3 MS2SSN\_Location\_Req message

The MS2SSN\_Location\_Req message is sent by an external system to request the details registered in the CLD for a specific location or a list of locations.

##### 3.1.3.1 Message description

MS2SSN_Location_Req Elements	Attributes	Occ
<b>Header</b> (location:HeaderType)		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId (location:ESRefIdType)	1
	SentAt (xs:dateTime)	1
	From (xs:string)	1
	To (xs:string)	1
<b>Body</b> (location:MS2SSN_LocationDetails_RequestBodyType)		<b>1</b>
	<b>LocationRequestCriteria</b> (location:LocationRequestCriteriaType)	<b>0-1</b>
	<b>Searchby5digitLoCode</b> (location:LoCodeType)	<b>0-1</b>
	<b>GISIScode</b> (epc:token)	<b>0-1</b>
	<b>LocationListRequestCriteria</b> (location:LocationListRequestCriteriaType)	<b>0-1</b>

MS2SSN_Location_Req Elements		Attributes	Occ
		<b>EncodeListYesOrNo</b> (epc:YesNoEnumType)	<b>1</b>
		<b>SearchByApplicationCode</b> (location:NameType)	<b>0-1</b>
		<b>SearchbyListOfCountryCode</b> (location:SearchbyListOfCountryCodeType)	<b>0-1</b>
		<b>CountryCode</b> (epc:CountryCodeContentType)	<b>0-99</b>
		<b>SearchForUpdates</b> (location:SearchForUpdatesType)	<b>0-1</b>
		StartTime (xs:dateTime)	1
		EndDateTime (xs:dateTime)	1
		<b>SearchByBip</b> (epc:YesNoEnumType)	<b>0-1</b>
		<b>SearchByTranshipmentPort</b> (epc:YesNoEnumType)	<b>0-1</b>

### 3.1.3.2 Business rules

The following table describes the the applicable business rules. The detailed definition of the attributes is included in Annex B.

No	MS2SSN_Location_Req Element or Attribute	Action
1	ESRefId	Must be unique for all the messages provided by the external system
2	From	Standard practice for the field is to include the reference identification of the originator of the data included in the message as defined in SSN.
3	Body	A valid Body element shall include either the <b>LocationRequestCriteria</b> element or the <b>LocationListRequestCriteria</b> , not both.
4	Searchby5digitLoCode	Unique identifier of the location (concatenation of the 2-character ISO code of a country and a 3-character unique location identifier as defined by UNECE and/ or in SSN).
5	GISIScode	If GISIScode is included in the LocationRequestCriteria, the Searchby5digitLoCode should be included too
6	EncodeListYesOrNo	If the value of the attribute is set to Yes , the response will be provided in Base64
7	SearchByApplicationCode	Search criterion for the locations currently active in the maritime application.
8	SearchbyListOfCountryCode	Search criterion for the locations belong to the list of countries.
9	SearchForUpdates	The search period.
10	SearchByBip	Search criterion for the locations approved as EU Border Inspection Posts.
11	SearchByTranshipmentPort	Search criterion for the locations where transhipment or landing operations of fishery products are authorized.

### 3.1.3.3 Example

Example of a request message:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"  
    xmlns:urn="urn:eu.emsa.ssn.location">
```

```

<soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
<wsa:Action>https://safeseanet.emsa.europa.eu/locationservice/requestdetails</wsa:Action>
<wsa:MessageID>CLD_TEST_20160422094029</wsa:MessageID>
<wsa:To>http://twls44.emsa.local:7006/ssn-location-ws/ssnlocationservice</wsa:To>
</soapenv:Header>
<soapenv:Body>
  <urn:MS2SSN_Location_Req>
    <urn:Header Version="1.0" ESRefId="CLD_TEST_20160422094029" SentAt="2016-04-22T09:40:29Z"
From="THETIS" To="SafeSeaNet"/>
    <urn:Body><!--Optional:</urn:Body>
      <urn:LocationRequestCriteria>
        <!--Optional:</urn:LocationRequestCriteria>
        <urn:Searchby5digitLoCode>GRPIR</urn:Searchby5digitLoCode>
        <!--Optional:</urn:LocationRequestCriteria>
        <urn:GISISCode>0027</urn:GISISCode>
      </urn:LocationRequestCriteria>
    </urn:Body>
  </urn:MS2SSN_Location_Req>
</soapenv:Body>
</soapenv:Envelope>

```

### 3.1.4 SSN2MS\_Location\_Res message

The SSN2MS\_Location\_Res message is the response sent by SafeSeaNet (CLD) to an external system which has requested location details from CLD using a **MS2SSN\_Location\_Req** message.

#### 3.1.4.1 Message description

SSN2MS_Location_Res Elements	Attributes	Occ	
<b>Header</b> ( <i>location:Header1Type</i> )		<b>1</b>	
	Version (xs:string)	1	
	TestId (xs:string)	0-1	
	ESRefId ( <i>location:ESRefIdType</i> )	1	
	SentAt (xs:dateTime)	1	
	From (xs:string)	1	
	To (xs:string)	1	
	SSNRefId ( <i>location:ESRefIdType</i> )	1	
	StatusCode ( <i>location:StatusCodeEnumType</i> )	1	
	StatusMessage (xs:string)	0-1	
<b>Body</b> ( <i>location:SSN2MS_LocationDetails_ResponseBodyType</i> )		<b>0-1</b>	
	ZippedLocationListInBase64 (xs:base64Binary)	0-1	
<b>LocationsListInXML</b> ( <i>location:LocationsListInXMLType</i> )		<b>0-1</b>	
	<b>LocationDetails</b> ( <i>location:LocationResponseDetailsType</i> )	<b>0-</b> <b>∞</b>	
	<b>CreatedOn</b> (complex)	<b>1</b>	
		CreatedOn (xsd:dateTime)	1
		CreatedBy ( <i>location:CreatedByType</i> )	1
	<b>LastUpdateOn</b> (complex)	<b>0-1</b>	
		LastUpdatedOn (xsd:dateTime)	1
		LastUpdatedBy ( <i>location:CreatedByType</i> )	1
	<b>IsActive</b> ( <i>epc:YesNoEnumType</i> )	<b>1</b>	
	<b>Digit5LoCode</b> ( <i>location:Digit5LoCodeType</i> )	<b>1</b>	

SSN2MS_Location_Req Elements		Attributes	Occ
		<b>LoCode</b> (location:LoCodeType)	<b>1</b>
		<b>LocationNameWithDiacritics</b> (location:NameType)	<b>0-1</b>
		<b>LocationNameWithoutDiacritics</b> (location:NameType)	<b>1</b>
		<b>Comments</b> (epc:string)	<b>0-1</b>
		<b>CountryCode</b> (epc:CountryCodeContentType)	<b>1</b>
		<b>Type</b> (location:LocationTypeEnumType)	<b>1</b>
		<b>FunctionsUNECE</b> (location:FunctionsUNECEType)	<b>0-8</b>
		Function (epc:int)	1
		<b>LocationPosition</b> (epc: PositionType)	<b>0-1</b>
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
		<b>AlternativeLocationNames</b> (location:AlternativeLocationNamesType)	<b>0-1</b>
		<b>LocName1</b> (location:LocationNamesType)	<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>LocName2</b> (location:LocationNamesType)	<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>LocName3</b> (location:LocationNamesType)	<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>LocName4</b> (location:LocationNamesType)	<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>PortFacility</b> (location:PortFacilityType)	<b>0-99</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>UNECESubsidiaryLocation</b> (epc:UNLoCodeContentType)	<b>0-1</b>
		<b>PortFacilityDetails</b> (location: PortFacilityDetailsType)	<b>0-1</b>
		<b>Name</b> (epc:string)	<b>1</b>
		<b>Description</b> (epc:string)	<b>1</b>

SSN2MS_Location_Req Elements		Attributes	Occ
		<b>LoCode</b> (location: LoCodeType)	<b>1</b>
		<b>GISIScode</b> (epc:token)	<b>1</b>
		<b>Position</b> (epc:PositionType)	<b>0-1</b>
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
	<b>SSNSubsidiaryLocations</b> (location:SSNSubsidiaryLocationsType)		<b>0-99</b>
		<b>LoCode</b> (epc:UNLoCodeContentType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>InSeca</b> (epc:YesNoEnumType)		<b>0-1</b>
	<b>LocationAttributes</b> (location:LocationAttributesType)		<b>0-1</b>
		Bip (epc:YesNoEnumType)	1
		TranshipmentPort (epc:YesNoEnumType)	1
	<b>InEU</b> (epc:YesNoEnumType)		<b>0-1</b>
	<b>ActiveInlist</b> (location:ActiveInlistType)		<b>0-1</b>
	<b>ApplicationUsingLocation</b> (ComplexType)		<b>1-99</b>
		Name (location:NameType)	1
		IsActive (epc:YesNoEnumType)	1
		LastUpdatedOn (xs:dateTime)	0-1

### 3.1.4.2 Business rules

The following table describes the XML message used for the transaction and the applicable business rules. The detailed definition of the attributes is included in Annex B.

No	SSN2MS_Location_Req Element or Attribute	Action
1	<i>Header</i>	<ol style="list-style-type: none"> <li>1. The ESRefId must be unique</li> <li>2. Standard practice for the To field is to include the reference identification of the resuestor of the data defined in the corresponding request message.</li> <li>3. Standard practice for the FROM field is to identify "SafeSeaNet" as the provider of the response message.</li> </ol>
2	<i>Body</i>	<ol style="list-style-type: none"> <li>1. A valid body, if included in the response, will include the data concerning a single location or a list of locations conforming with the criteria of the request.</li> <li>2. No quotation of the <i>Body</i> in the response signifies that the search query in the COD database returned no results.</li> <li>3. The response shall retrieve and provide all the data registered in the CLD at the timestamp of the SentAt for the location (s) listed in the response message</li> </ol>

### 3.1.4.3 Example

Example of a response message

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://safeceanet.emsa.europa.eu/locationservice/requestdetailsResponse</wsa:Action>
    <wsa:MessageID>1585679</wsa:MessageID>
    <wsa:To>http://172.16.125.63:8093/</wsa:To>
    <wsa:RelatesTo>CLD_TEST_20160422094153</wsa:RelatesTo>
  </soapenv:Header>
  <soapenv:Body>
    <ns0:SSN2MS_Location_Res xmlns="http://www.iso.org/28005-2"
      xmlns:ns0="urn:eu.emsa.ssn.location">
      <ns0:Header Version="1.0" ESRefId="CLD_TEST_20170109_3" SentAt="2017-01-09T14:54:57Z"
        From="SSN" To="GRPIR01" SSNRefId="1585679" StatusCode="OK" />
      <ns0:Body>
        <ns0:LocationsListInXML>
          <ns0:LocationDetails>
            <ns0:LocationNameWithDiacritics>Piraeus</ns0:LocationNameWithDiacritics>
            <ns0:LocationNameWithoutDiacritics>Piraeus</ns0:LocationNameWithoutDiacritics>
              <ns0:CountryCode>GR</ns0:CountryCode>
              <ns0:Type>1</ns0:Type>
              <ns0:FunctionsUNECE Function="2" />
              <ns0:FunctionsUNECE Function="4" />
              <ns0:FunctionsUNECE Function="0" />
              <ns0:LocationPosition>
                <Latitude>37.949580</Latitude>
                <Longitude>23.612100</Longitude>
              </ns0:LocationPosition>
              <ns0:AlternativeLocationNames>
                <ns0:LocName1>
                  <ns0:LocName>Piraeus 2</ns0:LocName>
                  <ns0:LastUpdateDetails>
                    <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                  </ns0:LastUpdateDetails>
                </ns0:LocName1>
                <ns0:LocName2>
                  <ns0:LocName>Piraeus</ns0:LocName>
                  <ns0:LastUpdateDetails>
                    <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                  </ns0:LastUpdateDetails>
                </ns0:LocName2>
                <ns0:AlternativeLocationNames>
                  <ns0:PortFacility>
                    <ns0:UNECESubsidiaryLocation>HHH</ns0:UNECESubsidiaryLocation>
                      <ns0:PortFacilityDetails>
                        <ns0:Name>facility name2</ns0:Name>
                        <ns0:Description>facility desc2</ns0:Description>
                        <ns0:LoCode>GRPIR</ns0:LoCode>
                        <ns0:GISISCode>0001</ns0:GISISCode>
                      </ns0:PortFacilityDetails>
                      <ns0:LastUpdateDetails>
                        <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                        <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                      </ns0:LastUpdateDetails>
                    </ns0:PortFacility>
                    <ns0:SSNSubsidiaryLocations>
                      <ns0:LoCode>TIN</ns0:LoCode>
                      <ns0:LastUpdateDetails>
                        <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                        <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                      </ns0:LastUpdateDetails>
                    </ns0:SSNSubsidiaryLocations>
                  </ns0:PortFacility>
                </ns0:AlternativeLocationNames>
              </ns0:LocName2>
            </ns0:LocationDetails>
          </ns0:LocationsListInXML>
        </ns0:Body>
      </ns0:SSN2MS_Location_Res>
    </soapenv:Body>
  </soapenv:Envelope>
```

```
<ns0:InSeca>Y</ns0:InSeca>
<ns0:LocationAttributes Bip="N" TranshipmentPort="N"/>
<ns0:InEU>Y</ns0:InEU>
<ns0:ActiveInlist>
<ns0:ApplicationUsingLocation IsActive="Y" Name="SSN" LastUpdatedOn="2016-
12-31T12:00:00"/>
</ns0:ActiveInlist>
<ns0:DatabaseRecordInfo>
<ns0:CreatedOn CreatedOn="2007-06-21T18:46:09Z"
CreatedBy="SSN" />
<ns0:LastUpdatedOn LastUpdatedOn="2016-10-19T10:06:37Z"
LastUpdatedBy="SSNADMIN" />
<ns0:IsActive>Y</ns0:IsActive>
</ns0:DatabaseRecordInfo>
<ns0:Digit5LoCode>
<ns0:LoCode>GRPIR</ns0:LoCode>
</ns0:Digit5LoCode>
</ns0:LocationDetails>
</ns0:LocationsListInXML>
</ns0:Body>
</ns0:SSN2MS_Location_Res>
</soapenv:Body>
</soapenv:Envelope>
```

## 3.2 Get Location logs from SSN

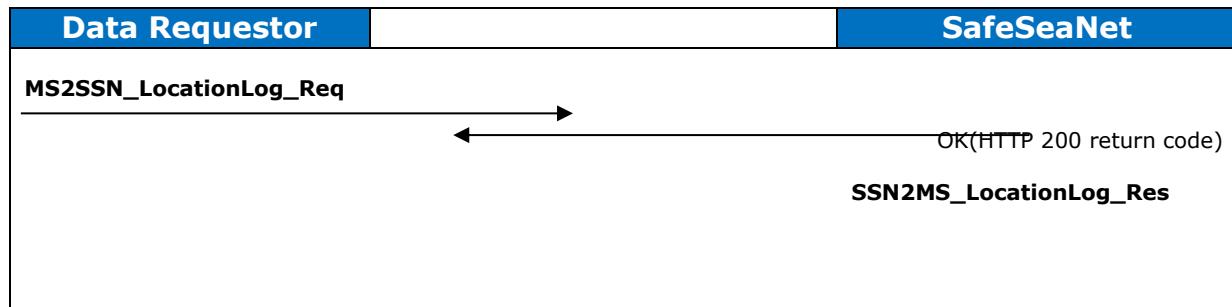
### 3.2.1 Introduction

An external system can request a journal of changes (the "logs") of the details of an individual Location during a time period.

This section describes the different XML messages provided for this transaction.

### 3.2.2 Message flow

The following figure outlines the expected synchronous flow of XML messages related to this transaction.



In accordance with the applicable wsdl (refer to Annex A), the request (QueryOperation) operation is provided by the SSN (SSNRole). It receives **MS2SSN\_LocationLog\_Req** requests from external systems and replies with **SSN2MS\_LocationLog\_Res** responses.

### 3.2.3 MS2SSN\_LocationLog\_Req message

The **MS2SSN\_LocationLog\_Req** message is sent by an external system to request the logs of changes of a specific Location record registered in the CLD.

### 3.2.3.1 Message description

MS2SSN_LocationLog_Req Elements	Attributes	Occ
<b>Header</b> ( <i>location:HeaderType</i> )		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId ( <i>location:ESRefIdType</i> )	1
	SentAt (xs:dateTime)	1
	From (xs:string)	1
	To (xs:string)	1
<b>Body</b> ( <i>location:MS2SSN_SingleLocationLogs_RequestBodyType</i> )		<b>0-1</b>
	<b>SingleLocationLogsRequest</b> ( <i>location:SingleLocationLogsRequestType</i> )	<b>1</b>
	<b>Searchby5digitLoCode</b> ( <i>location:LoCodeType</i> )	<b>0-1</b>
	<b>GISIScode</b> ( <i>epc:token</i> )	<b>0-1</b>
	<b>SearchLogsPeriod</b> ( <i>location:SearchLogsPeriodType</i> )	<b>0-1</b>
	StartTime (xs:dateTime)	1
	EndDateTime (xs:dateTime)	0-1

### 3.2.3.2 Business rules

The following table describes the XML message used for the transaction and the applicable business rules. The detailed definition of the attributes is included in Annex B.

No	MS2SSN_LocationLog_Req Element or Attribute	Action
1	MSRefId	Must be unique for all the messages provided by the external system
2	From	Standard practice for the field is to include the reference identification of the originator of the data included in the message as defined in SSN.
3	Body	A valid Body element shall include the SingleLocationLogsRequest with at least the Searchby5digitLoCode defined or the Searchby5digitLoCode and GISIScode defined (messages quoting only the GISIScode are invalid)  The request will always return the logs concerning a single location or (in the case that both Searchby5digitLoCode and GISIScode defined are defined in the request, a single port facility within a port).
4	SearchLogsPeriod element	<ol style="list-style-type: none"> <li>1. StartDateTime will be a time within maximum 60 calendar days in the past with respect to SentAt timestamp of the request message.</li> <li>2. EndDateTime will be a timestamp: <ul style="list-style-type: none"> <li>• Within maximum 60 calendar days in the past with respect to SentAt timestamp of the request message. It may be equal to the SentAt timestamp, or</li> <li>• Equal to SentAt timestamp</li> </ul> </li> <li>3. EndDateTime &gt; StartDateTime (</li> <li>4. If EndDateTime is not provided, the value of EndDateTime to be considered for the search will be the SentAt timestamp</li> </ol>

### 3.2.3.3 Example

Example of a SOAP message:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:urn="urn:eu.emsa.ssn.location">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://safeceanet.emsa.europa.eu/locationservice/requestlogs</wsa:Action>
    <wsa:MessageID>CLD_TEST_20160422094120</wsa:MessageID>
    <wsa:To>http://twls44.emsa.local:7006/ssn-location-ws/ssnlocationservice</wsa:To>
  </soapenv:Header>
  <soapenv:Body>
    <urn:MS2SSN_LocationLog_Req>
      <urn:Header Version="1.0" ESRefId="CLD_TEST_20160422094120" SentAt="2016-04-22T09:41:20Z"
        From="nswitrom1" To="SafeSeaNet"/>
      <urn:Body>
        <urn:SingleLocationLogsRequest>
          <!--Optional:-->
          <urn:Searchby5digitLoCode>GRPIR</urn:Searchby5digitLoCode>
          <!--Optional:-->
          <urn:GISISCode>5435</urn:GISISCode>
          <!--Optional:-->
          <urn:SearchLogsPeriod StartDateTime="2005-01-01T00:00:01" EndDateTime="2016-04-
            22T09:41:20Z"/>
        </urn:SingleLocationLogsRequest>
      </urn:Body>
    </urn:MS2SSN_LocationLog_Req>
  </soapenv:Body>
</soapenv:Envelope>
```

### 3.2.4 SSN2MS\_LocationLog\_Res message

The **SSN2MS\_LocationLog\_Res** message is sent by SafeSeaNet (CLD) to an external system which has requested the logs of changes to a particular Location record in the CLD using a **MS2SSN\_LocationLog\_Req** message.

#### 3.2.4.1 Message description

SSN2MS_LocationLog_Res Elements	Attributes	Occ
<b>Header</b> (location:Header1Type)		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId (location:ESRefIdType)	1
	SentAt (xs:dateTime)	1
	From (xs:string)	1
	To (xs:string)	1
	SSNRefId (location:ESRefIdType)	1
	StatusCode (location:StatusCodeEnumType)	1
	StatusMessage (xs:string)	0-1
<b>Body</b> (location:SSN2MS_LocationLogs_ResponseBodyType)		<b>0-1</b>
	<b>LocationLogsListInXML</b> (location:LocationsListInXMLType)	<b>0-1</b>
		<b>0-</b>
	<b>LocationLogsDetails</b> (location:LocationResponseDetailsType)	<b>∞</b>
	<b>DatabaseRecordInfo</b> (location:DatabaseRecordInfoType)	<b>1</b>
	<b>CreatedOn</b> (complex)	<b>1</b>

SSN2MS_LocationLog_Res Elements		Attributes	Occ
		CreatedOn (xsd:dateTime)	1
		CreatedBy (location:CreatedByType)	1
	<b>LastUpdateOn</b> (complex)		<b>0-1</b>
		LastUpdatedOn (xsd:dateTime)	1
		LastUpdatedBy (location:CreatedByType)	1
	<b>IsActive</b> (epc:YesNoEnumType)		<b>1</b>
	<b>Digit5LoCode</b> (location:Digit5LoCodeType)		<b>1</b>
		<b>LoCode</b> (location:LoCodeType)	<b>1</b>
	<b>LocationNameWithDiacritics</b> (location:NameType)		<b>0-1</b>
	<b>LocationNameWithoutDiacritics</b> (location:NameType)		<b>1</b>
	<b>Comments</b> (epc:string)		<b>0-1</b>
	<b>CountryCode</b> (epc:CountryCodeContentType)		<b>1</b>
	<b>Type</b> (location:LocationTypeEnumType)		<b>1</b>
	<b>FunctionsUNECE</b> (location:FunctionsUNECEType)		<b>0-8</b>
		Function (epc:int)	1
	<b>LocationPosition</b> (epc: PositionType)		<b>0-1</b>
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
	<b>AlternativeLocationNames</b> (location:AlternativeLocationNamesType)		<b>0-1</b>
	<b>LocName1</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
	<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)		<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName2</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
	<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)		<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName3</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
	<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)		<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName4</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
	<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)		<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>PortFacility</b> (location:PortFacilityType)		<b>0-99</b>

SSN2MS_LocationLog_Res Elements		Attributes	Occ
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>UNECESubsidiaryLocation</b> (epc:UNLoCodeContentType)	<b>0-1</b>
		<b>PortFacilityDetails</b> (location: PortFacilityDetailsType)	<b>0-1</b>
		<b>Name</b> (epc:string)	<b>1</b>
		<b>Description</b> (epc:string)	<b>1</b>
		<b>LoCode</b> (location: LoCodeType)	<b>1</b>
		<b>GISIScode</b> (epc:token)	<b>1</b>
		<b>Position</b> (epc:PositionType)	<b>0-1</b>
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
		<b>SSNSubsidiaryLocations</b> (location:SSNSubsidiaryLocationsType)	<b>0-99</b>
		<b>LoCode</b> (epc:UNLoCodeContentType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
		<b>InSeca</b> (epc:YesNoEnumType)	<b>0-1</b>
		<b>LocationAttributes</b> (location:LocationAttributesType)	<b>0-1</b>
		Bip (epc:YesNoEnumType)	1
		TranshipmentPort (epc:YesNoEnumType)	1
		<b>InEU</b> (epc:YesNoEnumType)	<b>0-1</b>
		<b>ActiveInlist</b> (location:ActiveInlistType)	<b>0-1</b>
		<b>ApplicationUsingLocation</b> (CompexType)	<b>1-99</b>
		Name (location:NameType)	1
		IsActive (epc:YesNoEnumType)	1
		LastUpdatedOn (xs:dateTime)	0-1

### 3.2.4.2 Business rules

The following table describes the XML message used for the transaction and the applicable business rules. The detailed definition of the attributes is included in Annex B.

No	SSN2MS_Location_Res Element or Attribute	Action
1	Header	<ol style="list-style-type: none"> <li>The ESRefId must be unique</li> <li>Standard practice for the To field is to include the reference identification of the resuestor of the data defined in the corresponding request message.</li> <li>Standard practice for the FROM field is to identify "SafeSeaNet" as the provider of the response message.</li> </ol>

No	SSN2MS_Location_Res Element or Attribute	Action
2	<i>Body</i>	A valid body, if included in the response, will include the data concerning a list reporting the changes made to a single location or a single port facility . Each repetition of the <i>LocationLogsDetails</i> element in the list return reports the data registered in CLD at the date identified by the LastUpdatedOn date time within the LocationLogDetails element

### 3.2.4.3 Example

Example of an SSN2MS\_LocationLog\_Res message:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://safeceanet.emsa.europa.eu/locationservice/requestlogs</wsa:ActionResponse><a href="#" style="color:blue; text-decoration:underline;">wsa:Action</a>
    <wsa:MessageID>CLD_TEST_20170109_3</wsa:MessageID>
    <wsa:To>http://172.16.125.63:8093</wsa:To>
    <wsa:RelatesTo>CLD_TEST_20160422094120</wsa:RelatesTo>
  </soapenv:Header>
  <soapenv:Body>
    <ns0:SSN2MS_LocationLog_Res xmlns="http://www.iso.org/28005-2"
      xmlns:ns0="urn:eu.emsa.ssn.location">
      <ns0:Header Version="1.0" ESRefId="CLD_TEST_20170109_3" SentAt="2017-01-09T14:54:57Z"
        From="SSN" To="GRPIR01" StatusCode="OK" />
      <ns0:Body>
        <ns0:LocationLogsListInXML>
          <ns0:LocationLogsDetails>
            <ns0:LocationNameWithDiacritics>Piraeus</ns0:LocationNameWithDiacritics>
            <ns0:LocationNameWithoutDiacritics>Piraeus</ns0:LocationNameWithoutDiacritics>
              <ns0:CountryCode>GR</ns0:CountryCode>
              <ns0:Type>1</ns0:Type>
              <ns0:FunctionsUNECE Function="2" />
              <ns0:FunctionsUNECE Function="4" />
              <ns0:FunctionsUNECE Function="0" />
              <ns0:LocationPosition>
                <Latitude>37.949580</Latitude>
                <Longitude>23.612100</Longitude>
              </ns0:LocationPosition>
              <ns0:AlternativeLocationNames>
                <ns0:LocName1>
                  <ns0:LocName>Piraeus 2</ns0:LocName>
                  <ns0:LastUpdateDetails>
                    <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                  </ns0:LastUpdateDetails>
                </ns0:LocName1>
                <ns0:LocName2>
                  <ns0:LocName>Piraeus</ns0:LocName>
                  <ns0:LastUpdateDetails>
                    <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                  </ns0:LastUpdateDetails>
                </ns0:LocName2>
              </ns0:AlternativeLocationNames>
              <ns0:PortFacility>
                <ns0:UNECESubsidiaryLocation>HHH</ns0:UNECESubsidiaryLocation>
                <ns0:PortFacilityDetails>
                  <ns0:Name>facility name2</ns0:Name>
                  <ns0:Description>facility desc2</ns0:Description>
                  <ns0:LoCode>GRPIR</ns0:LoCode>
                  <ns0:GISISCode>0001</ns0:GISISCode>
                </ns0:PortFacilityDetails>
              </ns0:PortFacility>
            </ns0:LocationLogsDetails>
          </ns0:LocationLogsListInXML>
        </ns0:Body>
      </ns0:SSN2MS_LocationLog_Res>
    </soapenv:Body>
  </soapenv:Envelope>

```

```
<ns0:LastUpdateDetails>
    <ns0:LastUpdatedOn>2016-10-
19T10:06:37Z</ns0:LastUpdatedOn>
    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
    </ns0:LastUpdateDetails>
</ns0:PortFacility>
<ns0:SSNSubsidiaryLocations>
    <ns0:LoCode>TIN</ns0:LoCode>
    <ns0:LastUpdateDetails>
        <ns0:LastUpdatedOn>2016-10-
19T10:06:37Z</ns0:LastUpdatedOn>
            <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
            </ns0:LastUpdateDetails>
</ns0:SSNSubsidiaryLocations>
<ns0:InSeca>Y</ns0:InSeca>
<ns0:LocationAttributes Bip="N" TranshipmentPort="N"/>
<ns0:InEU>Y</ns0:InEU>
<ns0:ActiveInlist>
    <ns0:ApplicationUsing1Location IsActive="Y" Name="SSN" LastUpdatedOn="2016-
12-31T12:00:00"/>
</ns0:ActiveInlist>
<ns0:DatabaseRecordInfo>
    <ns0:CreatedOn CreatedOn="2007-06-21T18:46:09Z"
CreatedBy="SSN" />
    <ns0:LastUpdatedOn LastUpdatedOn="2016-10-19T10:06:37Z"
LastUpdatedBy="SSNADMIN" />
        <ns0:IsActive>Y</ns0:IsActive>
        </ns0:DatabaseRecordInfo>
        <ns0:Digit5LoCode>
            <ns0:LoCode>GRPIR</ns0:LoCode>
        </ns0:Digit5LoCode>
        </ns0:LocationLogsDetails>
    </ns0:LocationLogsListInXML>
</ns0:Body>
</ns0:SSN2MS_LocationLog_Res>
</soapenv:Body>
</soapenv:Envelope>
```

## 3.3 Announcement mechanism

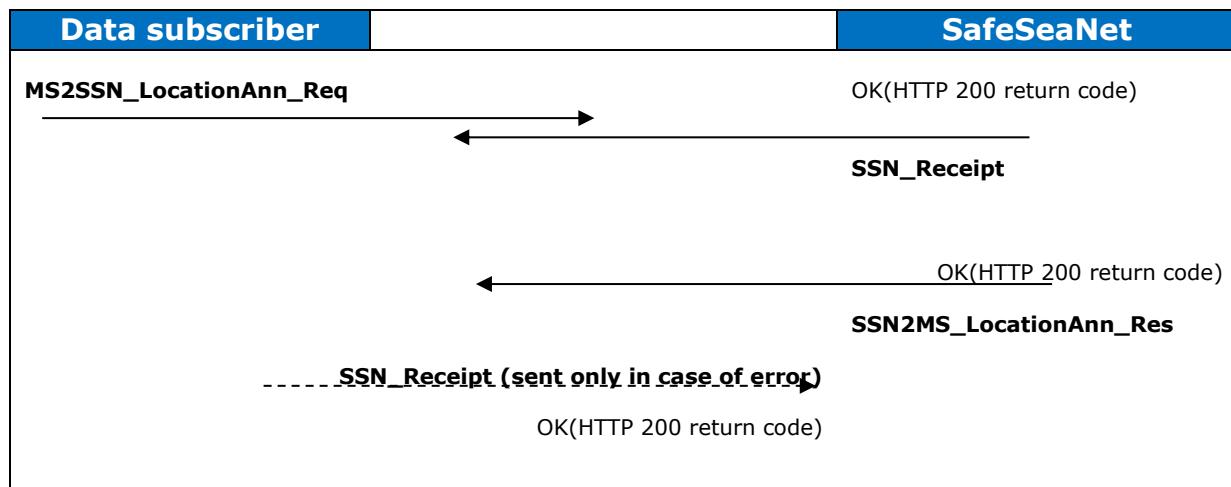
### 3.3.1 Introduction

An external system can subscribe to CLD for receiving the latest details of locations at each modification or creation of a location.

This section describes the different XML messages provided for this transaction.

### 3.3.2 Message flow

The following figure outlines the expected asynchronous flow of XML messages related to this transaction.



In accordance with the applicable wsdl (refer to Annex A):

- The subscription request (QueryOperation) operation is provided by the SSN (SSNRole). It receives **MS2SSN\_LocationAnn\_Req** requests from external systems and replies with a **SSN\_Receipt** message.
- The request announcement Callback (QueryOperationCallback) operation is provided by the external system (DataSubscriberRole). It receives **SSN2MS\_LocationAnn\_Res** messages from SSN and replies to SSN, in case of error, with a **SSN\_Receipt** message.

### 3.3.3 MS2SSN\_LocationAnn\_Req message

The **MS2SSN\_LocationAnn\_Req** message is sent by an MS to SSN for subscription to the Location data announcement (data “push”) service or cancelation of an existing subscription. The message contains information to enable the central SSN system (CLD) to configure the service.

#### 3.3.3.1 Message description

MS2SSN_LocationAnn_Req Elements	Attributes	Occ
<b>Header</b> (location:HeaderType)		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId (location:ESRefIdType)	1
	SentAt (xs:dateTime)	1
	From (xs:string)	1
	To (xs:string)	1
<b>Body</b> (location:MS2SSN_LocationDetailsAnnouncement_RequestBodyType)		<b>1</b>
<b>SearchCriteria</b> (location:AnnouncementSearchCriteriaType)		<b>0-1</b>
	<b>Application</b> (location:ApplicationType)	<b>1</b>
	ApplicationName (location:NameType)	1

MS2SSN_LocationAnn_Req Elements		Attributes	Occ
	<b>SubscriptionPeriod</b> (/location:SearchLogsPeriodType)		<b>1</b>
		StartTime (xs:dateTime)	1
		EndDateTime (xs:dateTime)	0-1
	<b>SubscriptionLimitedtoCountries</b> (/location:SubscriptionLimitedtoCountriesType)		<b>0-1</b>
		<b>CountryCode</b> (epc:CountryCodeContentType)	<b>1-99</b>
	<b>CancelSubscription</b> (location:CancelsSubscriptionType)		<b>0-1</b>
	CancelDataPush (xs:string)		1
	ESRefIdofSubscriptionToCancel (location:ESRefIdType)		1

### 3.3.3.2 Business rules

No	MS2SSN_LocationAnn_req Element or Attribute	Action
1	ESRefId	Must be unique for all the messages provided by the external system
2	From	Standard practice for the field is to include the reference identification of the originator of the data included in the message as defined in SSN.
3	Body	A valid Body shall define the SearchCriteria or the CancelSubscription element.
4	SearchCriteria	A valid SearchCriteria shall define at least one of the Application, SubscriptionPeriod, SubscriptionLimitedtoCountries elements
5	Application	Search criterion for the locations currently active in the maritime application.
6	SubscriptionPeriod	<p>1. StartDateTime will be a timestamp:</p> <ul style="list-style-type: none"> <li>• Within maximum 60 calendar days in the future with respect to SentAt timestamp of the Announcement request message, or</li> <li>• Equal to SentAt timestamp</li> </ul> <p>2. EndDateTime, if provided, will be any future timestamp with respect to SentAt where EndDateTime &gt; StartDateTime</p> <p>3. If EndDateTime is not provided, SSN will push all the records updates in the CLD starting from the StartDateTime. SSN will continue pushing announcements to the service subscriber</p> <p><u>Note:</u></p> <p>The present release does not foresee a mechanism for cancelling a subscription. Therefore it is recommended to introduce a EndDateTime in the <b>MS2SSN_LocationAnn_req</b>.</p>
7	SubscriptionLimitedtoCountries	Search criterion for the locations belong the list of countries.
8	CancelSubscription	<p>The only acceptable value for CancelDataPush is "Y" (yes)</p> <p>The ESRefIdofSubscriptionToCancel Should be always quoted in case of the cancellation of a previous subscription. The value of the attribute points to the ESRefId of the announcement request that is to be cancelled.</p>

### 3.3.3.3 Example

Example of a SOAP message for a valid subscription:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:eu.emsa.ssn.location">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://safeSeanet.emsa.europa.eu/locationservice/requestannouncement</wsa:Action>
    <wsa:ReplyTo>
      <wsa:Address>http://172.16.125.63:8093</wsa:Address></wsa:ReplyTo>
    <wsa:From><wsa:Address>http://172.16.125.63:8093</wsa:Address></wsa:From>
    <wsa:MessageID>CLD_TEST_20160422094153</wsa:MessageID>
    <wsa:To>http://twls44.emsa.local:7006/ssn-location-ws/ssnlocationservice</wsa:To></soapenv:Header>
  <soapenv:Body>
    <urn:MS2SSN_LocationAnn_Req>
      <urn:Header Version="1.0" ESRefId="CLD_TEST_20160422094153" SentAt="2016-04-22T09:41:53Z" From="pt_nca_qa2" To="SafeSeaNet"/>
        <urn:Body>
          <urn:SearchCriteria>
            <urn:Application ApplicationName="SSN"/>
            <urn:SubscriptionPeriod StartDate="2016-04-22T09:41:53Z" EndDate="2016-04-22T09:41:53Z" />
          </urn:SearchCriteria>
        </urn:Body>
      </urn:MS2SSN_LocationAnn_Req>
    </soapenv:Body>
  </soapenv:Envelope>
```

Example of a SOAP message for a valid subscription cancelation:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:eu.emsa.ssn.location">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://safeSeanet.emsa.europa.eu/locationservice/requestannouncement</wsa:Action>
    <wsa:ReplyTo>
      <wsa:Address>http://172.16.125.63:8093</wsa:Address></wsa:ReplyTo>
    <wsa:From><wsa:Address>http://172.16.125.63:8093</wsa:Address></wsa:From>
    <wsa:MessageID>CLD_TEST_C20160422094153</wsa:MessageID>
    <wsa:To>http://twls44.emsa.local:7006/ssn-location-ws/ssnlocationservice</wsa:To></soapenv:Header>
  <soapenv:Body>
    <urn:MS2SSN_LocationAnn_Req>
      <urn:Header Version="1.0" ESRefId="CLD_TEST_C20160422094153" SentAt="2016-04-23T09:41:53Z" From="pt_nca_qa2" To="SafeSeaNet"/>
        <urn:Body>
          <urn:CancelSubscription CancelDataPush="Y" ESRefIdofSubscriptionToCancel="CLD_TEST_20160422094153" />
        </urn:Body>
      </urn:MS2SSN_LocationAnn_Req>
    </soapenv:Body>
  </soapenv:Envelope>
```

### 3.3.4 SSN2MS\_LocationAnn\_Res message

The **SSN2MS\_LocationAnn\_Res** message is sent by SSN to a subscriber to the Location announcement (data "push") service. The message contains all the information registered in the most recent version (the one created just before the dispatch of the announcement message) of the location record in the CLD.

#### 3.3.4.1 Message description

SSN2MS_LocationAnn_Res Elements	Attributes	Occ
<b>Header</b> (location:Header1Type)		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId (location:ESRefIdType)	1

SSN2MS_LocationAnn_Resources	Attributes	Occ	
	SentAt (xs:dateTime)	1	
	From (xs:string)	1	
	To (xs:string)	1	
	SSNRefId (location:ESRefIdType)	1	
	StatusCode (location:StatusCodeEnumType)	1	
	StatusMessage (xs:string)	0-1	
<b>Body</b> (location:SSN2MS_SingleLocationDetails_ResponseBodyType)		<b>0-1</b>	
	<b>LocationDetails</b> (location:LocationResponseDetailsType)	<b>0-∞</b>	
		<b>1</b>	
	<b>DatabaseRecordInfo</b> (location:DatabaseRecordInfoType)		
		<b>1</b>	
	<b>CreatedOn</b> (complex)		
		<b>1</b>	
		CreatedOn (xsd:dateTime)	1
		CreatedBy (location:CreatedByType)	1
	<b>LastUpdateOn</b> (complex)		
		<b>0-1</b>	
		LastUpdatedOn (xsd:dateTime)	1
		LastUpdatedBy (location:CreatedByType)	1
	<b>IsActive</b> (epc:YesNoEnumType)		
		<b>1</b>	
	<b>Digit5LoCode</b> (location:Digit5LoCodeType)		
		<b>1</b>	
		<b>LoCode</b> (location:LoCodeType)	<b>1</b>
	<b>LocationNameWithDiacritics</b> (location:NameType)		
		<b>0-1</b>	
	<b>LocationNameWithoutDiacritics</b> (location:NameType)		
		<b>1</b>	
	<b>Comments</b> (epc:string)		
		<b>0-1</b>	
	<b>CountryCode</b> (epc:CountryCodeContentType)		
		<b>1</b>	
	<b>Type</b> (location:LocationTypeEnumType)		
		<b>1</b>	
	<b>FunctionsUNECE</b> (location:FunctionsUNECEType)		
		<b>0-8</b>	
		Function (epc:int)	1
	<b>LocationPosition</b> (epc: PositionType)		
		<b>0-1</b>	
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
	<b>AlternativeLocationNames</b> (location:AlternativeLocationNamesType)		
		<b>0-1</b>	
		<b>LocName1</b> (location:LocationNamesType)	<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
			<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName2</b> (location:LocationNamesType)		
		<b>0-1</b>	
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
			<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>

SSN2MS_LocationAnn_Res Elements		Attributes	Occ
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName3</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName4</b> (location:LocationNamesType)		<b>0-1</b>
		<b>LocName</b> (location:NameType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>PortFacility</b> (location:PortFacilityType)		<b>0-99</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>UNECESubsidiaryLocation</b> (epc:UNLoCodeContentType)		<b>0-1</b>
	<b>PortFacilityDetails</b> (location:PortFacilityDetailsType)		<b>0-1</b>
		<b>Name</b> (epc:string)	<b>1</b>
		<b>Description</b> (epc:string)	<b>1</b>
		<b>LoCode</b> (location: LoCodeType)	<b>1</b>
		<b>GISIScode</b> (epc:token)	<b>1</b>
		<b>Position</b> (epc:PositionType)	<b>0-1</b>
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
	<b>SSNSubsidiaryLocations</b> (location:SSNSubsidiaryLocationsType)		<b>0-99</b>
		<b>LoCode</b> (epc:UNLoCodeContentType)	<b>1</b>
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>
		<b>LastUpdatedOn</b> (xsd:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>InSeca</b> (epc:YesNoEnumType)		<b>0-1</b>
	<b>LocationAttributes</b> (location:LocationAttributesType)		<b>0-1</b>
		<b>Bip</b> (epc:YesNoEnumType)	1
		<b>TranshipmentPort</b> (epc:YesNoEnumType)	1
	<b>InEU</b> (epc:YesNoEnumType)		<b>0-1</b>
	<b>ActiveInlist</b> (location:ActiveInlistType)		<b>0-1</b>
		<b>ApplicationUsingLocation</b> (CompextType)	<b>1-99</b>
		<b>Name</b> (location:NameType)	1
		<b>IsActive</b> (epc:YesNoEnumType)	1
		<b>LastUpdatedOn</b> (xs:dateTime)	0-1

### **3.3.4.2 Business rules**

The following table describes the applicable business rules. The detailed definition of the attributes is included in Annex B

No	SSN2MS_LocationAnn_Res Element/ Attribute	Action
1	Header	<ul style="list-style-type: none"> <li>1. The MSRefId must be unique.</li> <li>2. Standard practice for the To field is to include the reference identification of the resuestor of the data defined in the corresponding request message.</li> <li>3. Standard practice for the FROM field is to identify "SafeSeaNet" as the provider of the response message.</li> </ul>
2	Body	<p>A valid body will include the data concerning a single location.</p> <p>The message shall provide all the data registered in the CLD at the timestamp of the SentAt for the location(s) listed in the response message.</p>

### **3.3.4.3 Example**

Example of a SOAP message for Location data announcement:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:urn="urn:eu.emsa.ssn.location" xmlns:ns="http://www.iso.org/28005-2">
  <soapenv:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>https://datasubscriber/locationservice/response</wsa:Action>
    <wsa:MessageID>1610586</wsa:MessageID>
    <wsa:To>http://twls44.emsa.local:7006/ssn-location-ws/ssnlocationservice</wsa:To>
    <wsa:RelatesTo>LocationAnn_20160603_2</wsa:RelatesTo>
  </soapenv:Header>
  <soapenv:Body>
    <ns0:SSN2MS_LocationAnn_Res xmlns="http://www.iso.org/28005-2"
      xmlns:ns0="urn:eu.emsa.ssn.location">
      <ns0:Header Version="1.0" ESRefId=" LocationAnn_20160603_2" SentAt="2017-01-09T14:54:57Z"
        From="SSN" To="GRPIR01" SSNRefId="1610586" StatusCode="OK" />
      <ns0:Body>
        <ns0:LocationDetails>
          <ns0:LocationNameWithDiacritics>Piraeus</ns0:LocationNameWithDiacritics>

          <ns0:LocationNameWithoutDiacritics>Piraeus</ns0:LocationNameWithoutDiacritics>
            <ns0:CountryCode>GR</ns0:CountryCode>
            <ns0:Type>1</ns0:Type>
            <ns0:FunctionsUNECE Function="2" />
            <ns0:FunctionsUNECE Function="4" />
            <ns0:FunctionsUNECE Function="0" />
            <ns0:LocationPosition>
              <Latitude>37.949580</Latitude>
              <Longitude>23.612100</Longitude>
            </ns0:LocationPosition>
            <ns0:AlternativeLocationNames>
              <ns0:LocName1>
                <ns0:LocName>Piraeus 2</ns0:LocName>
                <ns0:LastUpdateDetails>
                  <ns0:LastUpdatedOn>2016-10-19T10:06:37Z</ns0:LastUpdatedOn>
                  <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                </ns0:LastUpdateDetails>
              </ns0:LocName1>
              <ns0:LocName2>
                <ns0:LocName>Piraeus</ns0:LocName>
                <ns0:LastUpdateDetails>

```

```
<ns0:LastUpdatedOn>2016-10-
19T10:06:37Z</ns0:LastUpdatedOn>
    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
        </ns0:LastUpdateDetails>
    </ns0:LocName2>
    </ns0:AlternativeLocationNames>
    <ns0:PortFacility>

<ns0:UNECESubsidiaryLocation>HHH</ns0:UNECESubsidiaryLocation>
    <ns0:PortFacilityDetails>
        <ns0:Name>facility name2</ns0:Name>
        <ns0:Description>facility desc2</ns0:Description>
        <ns0:LoCode>GRPIR</ns0:LoCode>
        <ns0:GISISCode>0001</ns0:GISISCode>
    </ns0:PortFacilityDetails>
    <ns0:LastUpdateDetails>
        <ns0:LastUpdatedOn>2016-10-
19T10:06:37Z</ns0:LastUpdatedOn>
            <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
            </ns0:LastUpdateDetails>
        </ns0:PortFacility>
        <ns0:SSNSubsidiaryLocations>
            <ns0:LoCode>TIN</ns0:LoCode>
            <ns0:LastUpdateDetails>
                <ns0:LastUpdatedOn>2016-10-
19T10:06:37Z</ns0:LastUpdatedOn>
                    <ns0:LastUpdatedBy>SSN</ns0:LastUpdatedBy>
                    </ns0:LastUpdateDetails>
                </ns0:SSNSubsidiaryLocations>
                <ns0:InSeca>Y</ns0:InSeca>
                <ns0:LocationAttributes Bip="N" TranshipmentPort="N"/>
                <ns0:InEU>Y</ns0:InEU>
                <ns0:ActiveInlist>
                    <ns0:ApplicationUsinglLocation IsActive="Y" Name="SSN" LastUpdatedOn="2016-
12-31T12:00:00"/>
                </ns0:ActiveInlist>
                <ns0:DatabaseRecordInfo>
                    <ns0:CreatedOn CreatedOn="2007-06-21T18:46:09Z"
CreatedBy="SSN" />
                    <ns0:LastUpdatedOn LastUpdatedOn="2016-10-19T10:06:37Z"
LastUpdatedBy="SSNADMIN" />
                    <ns0:IsActive>Y</ns0:IsActive>
                </ns0:DatabaseRecordInfo>
                <ns0:Digit5LoCode>
                    <ns0:LoCode>GRPIR</ns0:LoCode>
                </ns0:Digit5LoCode>
            </ns0:LocationDetails>
        </Body>
    </SSN2MS_LocationAnn_Res>
</soapenv:Body>
</soapenv:Envelope>
```

## 3.4 Notification mechanism

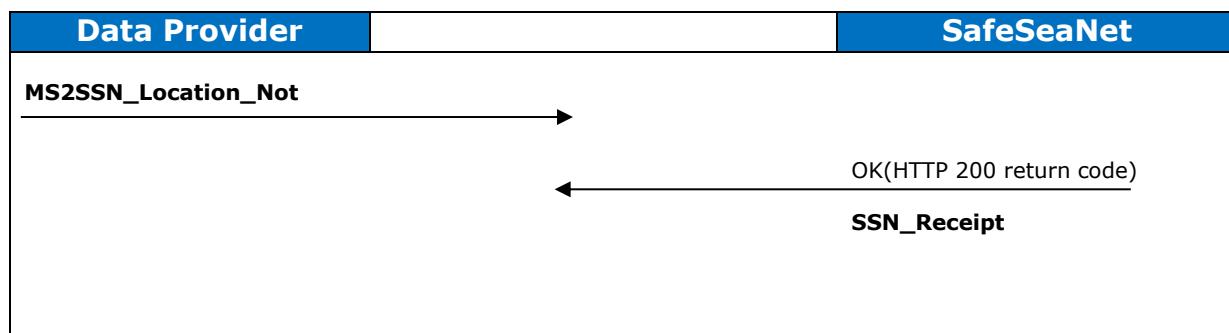
### 3.4.1 Introduction

The **MS2SSN\_Location\_Not** message is sent by an external system to notify CLD of new insertions or updates of locations.

This notification contains all the detailed information regarding a location. CLD will store all the details and may provide the information to other external system when requested.

### 3.4.2 Message flow

The following figure outlines the expected synchronous flow of XML messages related to this transaction.



In accordance with the applicable wsdl (refer to Annex A), the request (notify operation) operation is provided by the SSN (SSNRole). It receives **MS2SSN\_Location\_Req** requests from external systems and replies with **SSN2MS\_Location\_Res** messages.

### 3.4.3 MS2SSN\_Location\_Not message

#### 3.4.3.1 Message description

MS2SSN_Location_Not Elements	Attributes	Occ
<b>Header</b> ( <i>location:HeaderType</i> )		<b>1</b>
	Version (xs:string)	1
	TestId (xs:string)	0-1
	ESRefId ( <i>location:ESRefIdType</i> )	1
	SentAt (xs:dateTime)	1
	From (xs:string)	1
	To (xs:string)	1
<b>Body</b> ( <i>location:MS2SSN_LocationNotification_BodyType</i> )		<b>1</b>
<b>LocationNotificationDetails</b> ( <i>location: LocationNotificationDetailsType</i> )		<b>1</b>
<b>LocationNameWithDiacritics</b> ( <i>location:NameType</i> )		<b>0-1</b>
<b>LocationNameWithoutDiacritics</b> ( <i>location:NameType</i> )		<b>1</b>
<b>Comments</b> (epc:string)		<b>0-1</b>
<b>CountryCode</b> (epc:CountryCodeContentType)		<b>1</b>
<b>Type</b> ( <i>location:LocationTypeEnumType</i> )		<b>1</b>
<b>FunctionsUNECE</b> ( <i>location:FunctionsUNECEType</i> )		<b>0-8</b>

		Function(epc:int)	1	
	<b>LocationPosition</b> (epc:PositionType)		<b>0-1</b>	
		<b>Latitude</b> (epc:LatitudeType)	<b>1</b>	
		<b>Longitude</b> (epc:LongitudeType)	<b>1</b>	
	<b>AlternativeLocationNames</b> (location:AlternativeLocationNamesType)		<b>0-1</b>	
	<b>LocName1</b> (location:LocationNamesType)		<b>0-1</b>	
		<b>LocName</b> (location:NameType)	<b>1</b>	
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>	
			<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>
			<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName2</b> (location:LocationNamesType)		<b>0-1</b>	
		<b>LocName</b> (location:NameType)	<b>1</b>	
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>	
			<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>
			<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName3</b> (location:LocationNamesType)		<b>0-1</b>	
		<b>LocName</b> (location:NameType)	<b>1</b>	
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>	
			<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>
			<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>LocName4</b> (location:LocationNamesType)		<b>0-1</b>	
		<b>LocName</b> (location:NameType)	<b>1</b>	
		<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)	<b>1</b>	
			<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>
			<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>PortFacility</b> (location:PortFacilityType)		<b>0-99</b>	
	<b>UNECESubsidiaryLocation</b> (epc:UNLoCodeContentType)		<b>0-1</b>	
	<b>PortFacilityDetails</b> (location:PortFacilityDetailsType)		<b>0-1</b>	
		<b>Name</b> (epc:string)	<b>1</b>	
		<b>Description</b> (epc:string)	<b>1</b>	
		<b>LoCode</b> (location: LoCodeType)	<b>1</b>	
		<b>GISISCode</b> (epc:token)	<b>1</b>	
		<b>Position</b> (epc:PositionType)	<b>0-1</b>	
			<b>Latitude</b> (epc:LatitudeType)	<b>1</b>
			<b>Longitude</b> (epc:LongitudeType)	<b>1</b>
	<b>LastUpdateDetails</b> (location:LastUpdateDetailsType)		<b>1</b>	
		<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>	
			<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>SSNSubsidiaryLocations</b> (location:SSNSubsidiaryLocationsType)		<b>0-</b>	

		<b>99</b>	
	<b>LoCode</b> (epc:UNLoCodeContentType)	<b>1</b>	
	<b>LastUpdateDetails</b> (LastUpdateDetailsType)	<b>1</b>	
		<b>LastUpdatedOn</b> (xs:dateTime)	<b>1</b>
		<b>LastUpdatedBy</b> (location:CreatedByType)	<b>1</b>
	<b>InSeca</b> (epc:YesNoEnumType)	<b>0-1</b>	
	<b>LocationAttributes</b> (location:LocationAttributesType)	<b>0-1</b>	
		Bip (epc:YesNoEnumType)	1
		TranshipmentPort (epc:YesNoEnumType)	1
	<b>LocationNotificationStatus</b> (location: LocationNotificationStatusType)	<b>1</b>	
	<b>RecordUpdateStatus</b> (xs:string)	<b>1</b>	
	<b>Digit5LoCode</b> (location:Digit5LoCodeType)	<b>1</b>	
		<b>LoCode</b> (location:LoCodeType)	<b>1</b>

### 3.4.3.2 Business rules

The detailed definition of the attributes/ simple types as well as business rules concerning the syntax and business validation of simple types/ attributes is included in Annex B. The following table provides additional business rules concerning data elements/ attributes included in the message

No	MS2SSN_Location_Not Element or Attribute	Action
1	ESRefId	Must be unique for all the messages provided by the external system
2	LoCode	Must be unique in CLD database
3	Country	Country code defined by the Central Country Database
4	Status	Is only Inactive if inactive for all applications. If location is inactive in all applications, it shall become inactive in CLD

### 3.4.3.3 Example

Example of a XML message:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:urn="urn:eu.emsa.ssn.location" xmlns:ns="http://www.iso.org/28005-2"
  xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:epc="http://www.iso.org/28005-2"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <soapenv:Header>
    <wsa:Action>https://safeseanet.emsa.europa.eu/locationservice/notify</wsa:Action>
    <wsa:MessageID>MS2SSN_Loc_Not_20170214_1</wsa:MessageID>
  </soapenv:Header>
  <soapenv:Body>
    <urn:MS2SSN_Location_Not>
      <urn:Header ESRefId="MS2SSN_Loc_Not_20170214_1" From="GRPIR01" SentAt="2017-02-14T10:00:00Z"
        TestId="b" To="SSN" Version="1.0"/>
      <urn:Body>
        <urn:LocationNotificationDetails>
          <urn:LocationNameWithDiacritics>test_loc_2</urn:LocationNameWithDiacritics>
          <urn:LocationNameWithoutDiacritics>test loc 2</urn:LocationNameWithoutDiacritics>
          <urn:CountryCode>GR</urn:CountryCode>
          <urn>Type>0</urn>Type>
        </urn:LocationNotificationDetails>
      </urn:Body>
    </urn:MS2SSN_Location_Not>
  </soapenv:Body>
</soapenv:Envelope>

```

```
<urn:FunctionsUNECE Function="1"/>
<urn:FunctionsUNECE Function="2"/>
<urn:AlternativeLocationNames>
    <urn:LocName1>
        <urn:LocName>test location 2</urn:LocName>
        <urn:LastUpdateDetails>
            <urn:LastUpdatedOn>2017-02-14T10:00:00Z</urn:LastUpdatedOn>
            <urn:LastUpdatedBy>GRPIR01</urn:LastUpdatedBy>
        </urn:LastUpdateDetails>
    </urn:LocName1>
</urn:AlternativeLocationNames>
<urn:PortFacility>
    <urn:PortFacilityDetails>
        <urn:Name>name</urn:Name>
        <urn:Description>desc</urn:Description>
        <urn:LoCode>GRXXX</urn:LoCode>
        <urn:GISISCode>0002</urn:GISISCode>
        <urn:Position>
            <ns:Latitude>45</ns:Latitude>
            <ns:Longitude>90</ns:Longitude>
        </urn:Position>
    </urn:PortFacilityDetails>
    <urn:LastUpdateDetails>
        <urn:LastUpdatedOn>2017-02-14T10:00:00Z</urn:LastUpdatedOn>
        <urn:LastUpdatedBy>GRPIR01</urn:LastUpdatedBy>
    </urn:LastUpdateDetails>
</urn:PortFacility>
<urn:SSNSubsidiaryLocations>
    <urn:LoCode>XXX</urn:LoCode>
    <urn:LastUpdateDetails>
        <urn:LastUpdatedOn>2017-02-14T10:00:00Z</urn:LastUpdatedOn>
        <urn:LastUpdatedBy>GRPIR01</urn:LastUpdatedBy>
    </urn:LastUpdateDetails>
</urn:SSNSubsidiaryLocations>
<urn:InSeca>Y</urn:InSeca>
<urn:LocationAttributes Bip="Y" TranshipmentPort="Y"/>
<urn:LocationNotificationStatus>
    <urn:RecordUpdateStatus>UPDATED</urn:RecordUpdateStatus>
    <urn:Digit5LoCode>
        <urn:LoCode>GRXXX</urn:LoCode>
    </urn:Digit5LoCode>
</urn:LocationNotificationStatus>
<urn:LocationNotificationDetails>
</urn:Body>
</urn:MS2SSN_Location_Not>
</soapenv:Body>
</soapenv:Envelope>
```

## 3.5 SSN Receipt Message

### 3.5.1 Introduction

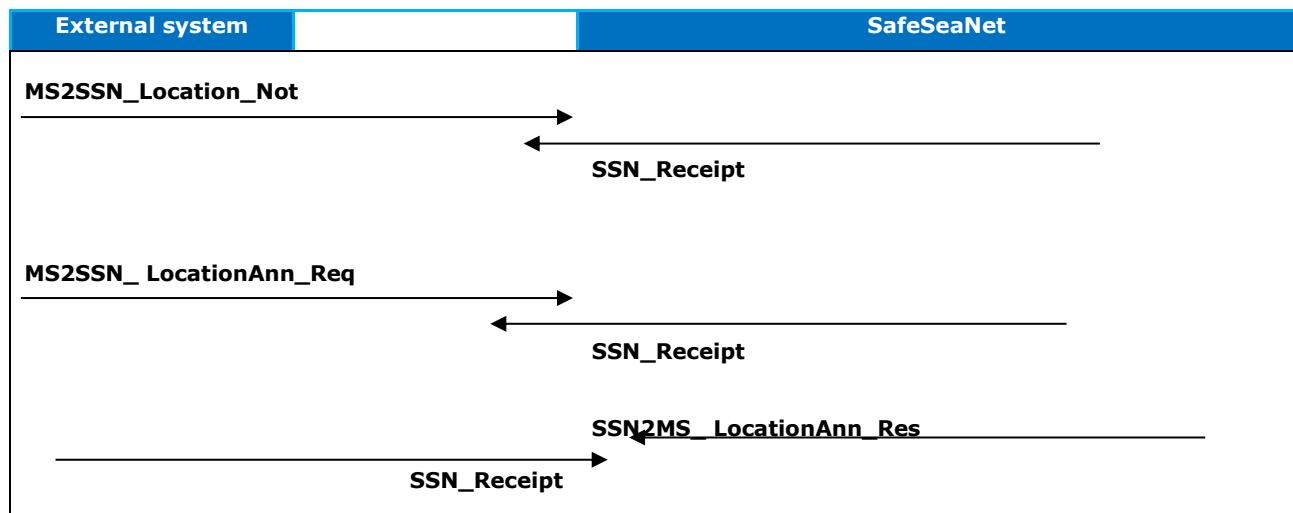
The SSN\_Receipt message serves several purposes. It is sent by SafeSeaNet as the confirmation message to every notification (**MS2SSN\_Location\_Not**) or subscription (**MS2SSN\_LocationAnn\_Req**) message from an External System that the message has been successfully validated and processed.

- The SSN\_Receipt message Status Code will be 'OK' if the message is compliant to the corresponding XSD and has been successfully validated and processed.,.
- The SSN\_Receipt message Status Code will be 'InvalidFormat' if the message is not compliant to the corresponding XSD, or is invalid.

The SSN Receipt message is also provided by external systems which have subscribed to the data announcement service of the CLD in case of error processing the data received through announcement messages.

### 3.5.2 Message flow

The following figure illustrates the cases when this message must be sent:



### 3.5.3 SSN\_Receipt.xml message

#### 3.5.3.1 Message description

SSN_Receipt Elements	Attributes	Occ
<b>Header</b> (ssn:Header1Type)		<b>1</b>
	Version	1
	TestId	0-1
	ESRefId	1
	SentAt	1
	From	1
	To	1
	StatusCode	1
	StatusMessage	0-1

#### 3.5.3.2 Business rules

The following table describes the XML message used for the transaction and the applicable business rules. The detailed definition of the attributes is included in the Annex B of this document.

Ref	Item (element or sub- element or specific attribute)	Description
1	<b>ESRefId</b>	The ESRefId must be unique.
2	<b>SSNRefId</b>	The SSNRefId must be unique
3	<b>SentAt</b>	Format "YYYY-MM-DDThh:mm:ssTZD" Where TZD = time zone designator (Z or +hh:mm or -hh:mm).

### 3.5.3.3 Example

Example of SSN Receipt sent in order to confirm the receipt of an Announcement request.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:MessageID>316752266</wsa:MessageID>
    <wsa:To SOAP-ENV:mustUnderstand="1">http://172.16.125.63:8093</wsa:To>
    <wsa:Action>https://safeseanet.emsa.europa.eu/locationservice/requestannouncementResponse</wsa:Action>
    <wsa:RelatesTo>CLD_TEST_20160422094153</wsa:RelatesTo>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns0:SSN_Receipt xmlns="http://www.iso.org/28005-2" xmlns:ns0="urn:eu.emsa.ssn.location">
      <ns0:Header ESRefId="CLD_TEST_20160422094153" From="SSN" SentAt="2016-04-22T08:41:54Z" StatusCode="OK" StatusMessage="The message processed successfully." To="pt_nca_qa2" Version="1.0"/>
    </ns0:SSN_Receipt>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

## 3.6 Status Codes and Status Messages

### 3.6.1 Introduction

Every response or receipt message includes a status code with an optional status message. They are used to provide the result of the processing of a message by SSN or by the External System.

### 3.6.2 Status codes

A status code is provided in every response or receipt message in the *StatusCode* attribute of the *Header* element. It may have one of the following values:

Attribute value	Description
InvalidFormat	The message was not valid
Timeout	The message has not been processed within time (according to the <i>TimeoutValue</i> attribute). This value may only be used by SSN in an XML response message.
ServerError	The message has not been successfully processed due to a server problem (e.g. connection problem, database problem, application problem).
OK	The message has been successfully received or the information requested in the corresponding request message has been found (response messages).
NotFound	The information requested in the request message does not exist. This value may only be used by SSN in a response message. This value is not available for MS2SSN messages
AccessDenied	The user account (identified via the <i>From</i> attribute of the <i>Header</i> element) is not allowed to send the message or does not exist.

### 3.6.3 Status messages

Next to the *StatusCode* attribute, a corresponding *StatusMessage* attribute is always provided and may be used to provide additional details regarding the status code.

The status message should be provided in the English language, as it is used for debugging.

Please refer to the description of the XML messages for more details.

## ANNEX A - DESCRIPTION OF SSN LOCATION WEB-SERVICE

---

```
<?xml version="1.0" encoding="UTF-8"?><wsdl11:definitions
xmlns:wsdl11="http://schemas.xmlsoap.org/wsdl/" name="locationservice"
targetNamespace="https://safeseanet.emsa.europa.eu/ssn-location-ws/locationservice"
xmlns:tns="https://safeseanet.emsa.europa.eu/ssn-location-ws/locationservice"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:location="urn:eu.emsa.ssn.location"
xmlns:soap11="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.w3.org/2006/05/addressing/wsdl
http://www.w3.org/2006/05/addressing/wsdl/ws-addr-wsdl.xsd
http://schemas.xmlsoap.org/wsdl/ http://schemas.xmlsoap.org/wsdl/2004-08-24.xsd
http://schemas.xmlsoap.org/wsdl/soap/ http://schemas.xmlsoap.org/wsdl/soap/2004-08-24.xsd">
```

<wsdl11:documentation>WSDL File for EIS location service</wsdl11:documentation>

```
<wsdl11:types>
    <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
        <xsd:import namespace="urn:eu.emsa.ssn.location"
schemaLocation="SSN_Location_Exchange.xsd"/>
    <!--           <xsd:import namespace="http://www.iso.org/28005-2"
schemaLocation="iso28005-2.xsd" /> -->
        </xsd:schema>
    </wsdl11:types>

    <!-- Notification Message -->
    <wsdl11:message name="NotificationLocation">
        <wsdl11:part name="ms_notification" element="location:MS2SSN_Location_Not"/>
    </wsdl11:message>
    <wsdl11:message name="NotificationReceipt">
        <wsdl11:part name="ssn_notification_receipt" element="location:SSN_Receipt"/>
    </wsdl11:message>

    <!-- Request Message -->
    <wsdl11:message name="RequestLocationDetails">
        <wsdl11:part name="ms_request" element="location:MS2SSN_Location_Req"/>
    </wsdl11:message>
    <wsdl11:message name="ResponseLocationDetails">
        <wsdl11:part name="ssn_request_receipt"
element="location:SSN2MS_Location_Res"/>
    </wsdl11:message>
    <!-- Request Logs Message -->
    <wsdl11:message name="RequestLocationLogs">
        <wsdl11:part name="ms_request_logs"
element="location:MS2SSN_LocationLog_Req"/>
    </wsdl11:message>
    <wsdl11:message name="ResponseLocationLogs">
        <wsdl11:part name="ssn_request_logs_receipt"
element="location:SSN2MS_LocationLog_Res"/>
    </wsdl11:message>

    <!-- Request for Announcement Message -->
    <wsdl11:message name="RequestAnnouncement">
        <wsdl11:part name="ms_request_ann"
element="location:MS2SSN_LocationAnn_Req"/>
```

```
</wsdl11:message>
<wsdl11:message name="AnnouncementReceipt">
    <wsdl11:part name="ssn_announcement_receipt" element="location:SSN_Receipt"/>
</wsdl11:message>

<!-- Part of Data Subscriber implementation -->
<wsdl11:message name="AnnouncementLocation">
    <wsdl11:part name="ssn_push" element="location:SSN2MS_LocationAnn_Res"/>
</wsdl11:message>
<!--> <wsdl11:message name="RequestCallbackFault">
    <wsdl11:part name="ms_fault_response_receipt"
element="location:SSN_Receipt"></wsdl11:part>
</wsdl11:message>
--> <!-- Part of Data Subscriber implementation -->

<!--
    The notify operation is provided by the SSN ( SSNRole ). It receives
    MS2SSN_Location_Not notifications from the data providers and replies
    to the data provider with a SSN_Receipt message.
-->
<wsdl11:portType name="NotifyPortType">
    <wsdl11:operation name="notify">
        <wsdl11:input message="tns:NotificationLocation"/>
        <wsdl11:output message="tns:NotificationReceipt"/>
    </wsdl11:operation>
</wsdl11:portType>

<!--
    The request (QueryOperation) operation is provided by the SSN
    (SSNRole). It receives MS2SSN_Location_Req requests from data
    requestors and responses with SSN2MS_Location_Res responses.
-->
<wsdl11:portType name="RequestDetailsPortType">
    <wsdl11:operation name="request_details">
        <wsdl11:input message="tns:RequestLocationDetails"/>
        <wsdl11:output message="tns:ResponseLocationDetails"/>
    </wsdl11:operation>
</wsdl11:portType>

<!--
    The request (QueryOperation) operation is provided by the SSN
    (SSNRole). It receives MS2SSN_LocationLogs_Req requests from data
    requestors and responses with SSN2MS_LocationLogs_Res responses.
-->
<wsdl11:portType name="RequestLogsPortType">
    <wsdl11:operation name="request_logs">
        <wsdl11:input message="tns:RequestLocationLogs"/>
        <wsdl11:output message="tns:ResponseLocationLogs"/>
    </wsdl11:operation>
</wsdl11:portType>

<!--
    The request (QueryOperation) operation is provided by the SSN
    (SSNRole). It receives MS2SSN_LocationAnn_Req requests from data
    requestors and responses with a SSN_Receipt message.
-->
<wsdl11:portType name="RequestAnnPortType">
    <wsdl11:operation name="request_announcement">
        <wsdl11:input message="tns:RequestAnnouncement"/>
    </wsdl11:operation>
</wsdl11:portType>
```

```
<wsdl11:output message="tns:AnnouncementReceipt"/>
</wsdl11:operation>
</wsdl11:portType>

<!-- Part of Data Subscriber implementation -->
<!--
    The request announcement Callback (QueryOperationCallback) operation is provided
by
the data Subscriber (DataSubscriberRole). It receives
SSN2MS_LocationAnn_Res from the SSN and ...
replies to SSN in case of error with a SSN_Received message.
-->
<wsdl11:portType name="RequestAnnCallbakPortType">
    <wsdl11:operation name="request_announcement_callback">
        <wsdl11:input name="ssn_push" message="tns:AnnouncementLocation"/>
<!--
        <wsdl11:output name="ms_fault_response_receipt"
            message="tns:RequestCallbackFault"></wsdl11:output>
-->
    </wsdl11:operation>
</wsdl11:portType>
<!-- Part of Data Subscriber implementation -->

<wsdl11:binding name="locationNotifyServiceSOAP" type="tns:NotifyPortType">
    <soap11:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl11:operation name="notify">
            <soap11:operation
soapAction="https://safeseanet.emsa.europa.eu/locationservice/notify"/>
                <wsdl11:input>
                    <soap11:body use="literal"/>
                </wsdl11:input>
                <wsdl11:output>
                    <soap11:body use="literal"/>
                </wsdl11:output>
            </wsdl11:operation>
        </wsdl11:binding>

        <wsdl11:binding name="locationRequestDetailsServiceSOAP"
type="tns:RequestDetailsPortType">
            <soap11:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
                <wsdl11:operation name="request_details">
                    <soap11:operation
soapAction="https://safeseanet.emsa.europa.eu/locationservice/requestdetails"/>
                        <wsdl11:input>
                            <soap11:body use="literal"/>
                        </wsdl11:input>
                        <wsdl11:output>
                            <soap11:body use="literal"/>
                        </wsdl11:output>
                    </wsdl11:operation>
                </wsdl11:binding>

                <wsdl11:binding name="locationRequestLogsServiceSOAP"
type="tns:RequestLogsPortType">
                    <soap11:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
                    <wsdl11:operation name="request_logs">
                        <soap11:operation
soapAction="https://safeseanet.emsa.europa.eu/locationservice/requestlogs"/>
```

```
<wsdl11:input>
    <soap11:body use="literal"/>
</wsdl11:input>
<wsdl11:output>
    <soap11:body use="literal"/>
</wsdl11:output>
</wsdl11:operation>
</wsdl11:binding>

<wsdl11:binding name="locationRequestAnnServiceSOAP"
type="tns:RequestAnnPortType">
    <soap11:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl11:operation name="request_announcement">
            <soap11:operation
soapAction="https://safeseanet.emsa.europa.eu/locationservice/requestannouncement"/>
                <wsdl11:input>
                    <soap11:body use="literal"/>
                </wsdl11:input>
                <wsdl11:output>
                    <soap11:body use="literal"/>
                </wsdl11:output>
            </wsdl11:operation>
        </wsdl11:binding>

        <wsdl11:service name="SSNLocationService">
            <wsdl11:port binding="tns:locationNotifyServiceSOAP"
name="LocationNotifyService">
                <soap11:address location="https://safeseanet.emsa.europa.eu"/>
            </wsdl11:port>
            <wsdl11:port binding="tns:locationRequestDetailsServiceSOAP"
name="LocationRequestDetailsService">
                <soap11:address location="https://safeseanet.emsa.europa.eu"/>
            </wsdl11:port>
            <wsdl11:port binding="tns:locationRequestLogsServiceSOAP"
name="LocationRequestLogsService">
                <soap11:address location="https://safeseanet.emsa.europa.eu"/>
            </wsdl11:port>
            <wsdl11:port binding="tns:locationRequestAnnServiceSOAP"
name="LocationRequestAnnouncementService">
                <soap11:address location="https://safeseanet.emsa.europa.eu"/>
            </wsdl11:port>
        </wsdl11:service>

        <!-- Part of Data Subscriber implementation -->
        <wsdl11:binding name="locationDataSubscriberServiceSOAP"
type="tns:RequestAnnCallbakPortType">
            <soap11:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
                <wsdl11:operation name="request_announcement_callback">
                    <soap11:operation
soapAction="https://datasubscriber/locationservice/response"/>
                        <wsdl11:input>
                            <soap11:body use="literal"/>
                        </wsdl11:input>
                        <wsdl11:output>
                            <soap11:body use="literal"/>
                        </wsdl11:output>
                    </wsdl11:operation>
                </wsdl11:binding>
```

```
</wsdl11:binding>
<wsdl11:service name="DataSubscriberLocationService">
    <wsdl11:port binding="tns:locationDataSubscriberServiceSOAP"
name="DataSubscriberLocationResponseService">
        <soap11:address location="https://datasubscriber"/>
    </wsdl11:port>
</wsdl11:service>

</wsdl11:definitions>
```

## **ANNEX B – ATTRIBUTES AND SIMPLE TYPE DEFINITIONS**

---

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
ApplicationName	Text	1-10	The name of the application exchanging data with CLD.	MS2SSN_LocationAnn_Req
ApplicationNameUsing\Location	Text	1-10	The name of the application exchanging data with CLD. Value equal to ApplicationName	SSN2MS_LocationLog_Res
Comments	Text	1-256	Any additional information regarding the location.	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
CountryCode	Text	2	Two-characters Country code of a Country is registered into the Central Country Database – CCD maintained by EMSA).  Accepted values are those associated with standard political entity: Alpha-2 (two-characters) in accordance with standard ISO 3166-1) of the Country as well as the following codes assigned to virtual counties: EU – for “European Commission” XZ – for “Installations in international waters”	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
CreatedBy (location:CreatedByType)	Text	1-32	A valid SSN unique user Identifier. of the user who created a location in the CLD	SSN2MS_Location_Res SSN2MS_LocationAnn_Res

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
				SSN2MS_LocationLog_Res
CreatedOn (xsd:dateTime)	DT		Date and time of the creation of a location in the CLD	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
Description	Text	1-255	Facility description in GISIS Maritime Security	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
EncodeListYesOrNo	Enum		Possible values: Y or N	MS2SSN_Location_Req
EndDateTime (xs:dateTime)	DT		Ending point of a time window declared to define a query	MS2SSN_LocationAnn_Req
ESRefId (location:ESRefIdType)	Text	1-36	Reference identifier specified by the original caller. It will be inserted by SafeSeaNet in the ESRefId attribute of the SSN_Receipt.xml response.	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
From	Text	7-32	The UserID of the system user despatching a message (as defined in SafeSeaNet). Best practice for the field is to include the	MS2SSN_Location_Not MS2SSN_Location_Req

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
			reference identification of the originator of the data included in the message	SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
Function	Num	1	Function number (classifier code) as defined by UNECE. Mandatory for UNECE locations.	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
GISIScode	Text	4	The GISIS code field is a four-digit string corresponding to the port facility's code in the IMO GISIS maritime security database	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
InEU	Enum		Indicates whether the location is in the EU. This is used for EU locations not associated to an actual country (e.g. XZ)  Possible values: Y or N	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
InSeca	Enum		Whether the location is in a Sulphur Emission Control Area (SECA).  Possible values: Y or N	MS2SSN_Location_Not SSN2MS_Location_Res

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
				SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LastUpdatedBy	Text	1-32	A valid SSN unique user Identifier. of the user who last updated an organisation in the COD	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LastUpdatedOn (xsd:dateTime)	DT		Date and time of the last update of an organisation in the COD	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
Latitude	Decimal		Latitude in decimal degrees	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LocationNameWithDiacritics	Text	1-50	Official name of the location with diacritics. Equals to the Name with diacritics provided by UNECE for UNECE locations (e.g. Zákynthos for Locode GRZTH)	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LocationNameWithoutDiacritics	Text	1-50	Name of the location without diacritics. Equals to the Name without diacritics provided by UNECE for UNECE locations (e.g. Zakynthos for Locode GRZTH).	MS2SSN_Location_Not SSN2MS_Location_Res

## Location Data Exchange

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
				SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LocName	Text	1-50	Alternative location name ((e.g. Zante for Locode GRZTH)	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
LoCode	Text	5	Unique identifier of the location (concatenation of the 2-character ISO code of a country and a 3-character unique location identifier as defined by UNECE and/or in SSN).  <b>Note:</b> SSN specific locodes in the form [Countrycode_888] (e.g.PT888) are used in the context of CLD to identify an unknown port in a given country	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
Longitude	Decimal		Longitude in decimal degrees	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
Name	Text	1- Undefined	Name of a port, written as the port name is normally written.	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
RecordUpdateStatus	Text	1-	Informative Field identifying if MS2SSN_Location_Not is a new notification	MS2SSN_Location_Not

## Location Data Exchange

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
		Undefined	<p>sent by the data provider (in order to create a new location into the CLD) or iif the notification is sent in order to update previously provided data.</p> <p><b>Note:</b> In the present release no validation is executed in relation to this field and there no processing rules associated to the notification status reported by the field.</p>	
Searchby5digitLoCode	Text	5	<p>Unique identifier of the location (concatenation of the 2-character ISO code of a country and a 3-character unique location identifier as defined by UNECE and/or in SSN).</p> <p><b>Note:</b> SSN specific locodes in the form [Countrycode_888] (e.g.PT888) are used in the context of CLD to identify an unknown port in a given country</p>	MS2SSN_Location_Req MS2SSN_LocationLog_Req
SentAt	DT		<p>Date and time the message was sent. If local time is used ES application has to adjust the time to UTC.</p> <p>Format "YYYY-MM-DDThh:mm:ssTZD"</p> <p>Where TZD = time zone designator (Z or +hh:mm or -hh:mm).</p>	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
StartTime	DT		Starting point of a time window declared to define a query	MS2SSN_Location_Req

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
				MS2SSN_LocationAnn_Req MS2SSN_LocationLog_Req
Status	Enum		Indicates whether the location is active in the CLD.  Possible values: Y or N	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
StatusCode	ENUM		Global status code, refer to section <b>Error! Reference source not found.</b>	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res SSN_Receipt
StatusMessage (xs:string)	Text	0-255	Global status message string. Refer to section <b>Error! Reference source not found.</b>	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res SSN_Receipt
TestId (xs:string)	Text	0-8	Test Case identification. Only useful for testing	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
To	Text	7-32	The reference identification of the recipient of	MS2SSN_Location_Not

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
			a message exchanged	MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
Type	Enum		Type of the location (e.g. SSN specific, UNECE).  Possible values: 0 or 1	SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
UNECESubsidiaryLocation	Text	3	Subsidiary location within the port or port approaches (e.g. a terminal in the port, a berth, an anchorage site, a fairway section etc) as defined in UNECE recommendation 16	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
UNLoCode	Text	3	Three-letter location code as defined in UNECE R16. The location code (lower case) "xxx" is reserved for an unknown location code.	MS2SSN_Location_Not SSN2MS_Location_Res SSN2MS_LocationAnn_Res SSN2MS_LocationLog_Res
Version (xs:string)	Text	3	COD web services current version ('x.x')	MS2SSN_Location_Not MS2SSN_Location_Req SSN2MS_Location_Res MS2SSN_LocationAnn_Req

**Location Data Exchange**

Error! Unknown document property name.

Version: 1.02

05/09/2017

Attribute/Element (simple type) name	Data Type	Len	Description and general rules	Message(s) that the attribute/ simple type is included
				SSN2MS_LocationAnn_Res MS2SSN_LocationLog_Req SSN2MS_LocationLog_Res SSN_Receipt
ZippedLocationListInBase64	Base64		Base64 encoded content including a list of locations. For each of the location the list reports the attributes foreseen in the the LocationDetails ELEMENT foreseen in the structure of the SSN2MS_Location_Res	SSN2MS_Location_Res