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EUROPEAN MARITIME SAFETY AGENCY

Cais Do Sodré 1249-206 Lisbon, Portugal

SafeSeaNet System DataBase Design

SSN

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	NAME	DATE	SIGNATURE
Prepared by:	I. Ioannou, Y. Tassopoulos	18.01.2019	
Checked by:	A. Argyropoulos	21.01.2019	
Quality control by:	N. Karioti	21.01.2019	
Approved by:			

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1 Introduction

1.1 Purpose

This document defines the SSN system database design. Additional documents that complete the SSN system design specification are:

- SDD: System Design Document
- GIDD-TI: Graphical Design Document – Textual Interface
- GIDD-GI: Graphical Design Document – Graphical Interface

1.2 Scope

The primary scope of the SSN database is to store information from vessel notification messages send to the Central SSN, vessel particular data, definitions of locations that refer to Ports and SSN participant authority and user information.

The SSN database stores also application configuration information and reference tables.

This document provides the SSN EIS data model the STIRES_SCHEMA specific objects defined for the refurbished SSN GI and the REF_ADMIN objects specific for CSD. This document described the underlining database structure, what are the entities managed by the database and how the tables are organised.

1.3 Reference documents

Id	Reference	Title	Version
R1	RUP Formal Resources Version 1.2	Rational Unified Process Formal Resources based on RUP Version: 2003.06.13	1.2
R2	N/A	Business Process Modelling Notation (BPMN)	1.2
R3	SSN-EIS-SRS	SSN EIS System Requirements Specifications	1.00
R4	SSN-XMLMessagingRefGuide	SSN XML Reference Guide	4.02
R5	Answer to RFS-EMSA-OP08-2015-SC#10-v1.00	System Requirements - SC#10 under FWC2015/EMSA/OP/18/2015	1.00

Table 1-1: Reference Documents

1.4 Abbreviations and acronyms

A list of the principal abbreviations and acronyms used in the document is provided here for a better understanding of this document.

Abbreviation	Definition
AIS	Automatic Identification Systems
CLD	Central Locations Database
COD	Central Organizations Database
CSD	Central Ship Database
EIS	European Index Server
EMSA	European Maritime Safety Agency
ER	Entity Relationship
ERD	Entity Relationship Diagram
HTML	Hyper Text Markup Language
HTTP	Hyper Text Transfer Protocol
HTTPS	Hyper Text Transfer Protocol over SSL
ID	Identification number
IMO	International Maritime Organisation
ISO	International Organization for Standardization
LCA	LOCAL Competent Authority
MMSI	Maritime Mobile Service Identity
MRS	Mandatory Identification System
IdM V2	Identity and Access Management, version 2
IoC	Inversion of Control
IE	Internet Explorer
II	INTRASOFT International
JMS	Java Message Service
JNDI	Java Naming and Directory Interface; used for reference to Java EE components defined in WebLogic server.
JSP	Java Server Pages
JSTL	JavaServer Pages Standard Tag Library
MMSI	Maritime Mobile Service Identity
MRS	Mandatory Ship Reporting System
MS	Member States.
MSS	Maritime Support Services
MSS Tool	Messages Availability MSS tool

Abbreviation	Definition
MVC	Model-view-controller
N/A	Not Applicable or Not Available
NCA	National Competent Authority
OVR	Operational Vessel Registry
Req	Request
RUP	Rational Unified Process
SAT	Ship Activity Tracking
SQL	Structured Query Language
SSL	Secure Socket Layer
SSN	SafeSeaNet
TR	Table Reference
TRD	Table Reference Diagram
UML	Unified Modelling Language
URL	Unified Resource Locator
UTC	Coordinated Universal Time
V&V	Vessel Verification and Validation
XML	eXtensible Markup Language

Table 1-2: Abbreviations and Acronyms

2 Detail Design of the SSN Databases

The database design consists of the logical and the physical data models. The logical data model is based upon the definitions of the system requirements. Furthermore, the entities are mapped to tables that will store the data in the database; the attributes are mapped to table columns; unique primary identifiers yield primary keys for each table, and the relationships generate foreign key constraints. The physical data model is built upon the logical data model by incorporating additional requirements in the model. As a result, additional database objects, such as indexes are defined. Whereas the logical model is largely independent of implementation details, the physical model describes exactly how the logical design will be implemented in the Oracle RDBMS server.

2.1 Data Model Approach

2.1.1 Introduction

The Physical Data Model is depicted in the following sections models the information system including the details of physical implementation.

For the SSN system, the *Oracle SQL Developer – Data Modeler* is deployed to visually represent the tables of the system.

2.1.2 Logical Database Requirements

The SafeSeaNet system is expected to implement a robust database design. The system's database should enforce and enable all the constraints necessary to ensure data integrity and also contain adequate primary/foreign keys as well as indexes on all the tables. Where possible, security should be enforced by ORACLE access privileges without solely relying on the application code. This also means that no application user should have direct access to the Oracle database.

The exact database structure will be determined during the design phase. However the following information should be considered for permanent storage:

- Operational, those originate from XML messages exchanged (e.g. Notification/Request/Response).
- System specific metadata.
- Reference data.

During the database design phase, the technical architect should also be aware that the data types and field sizes should match the corresponding definitions in the XML Reference Guide.

2.1.3 Data modelling methodology

Data Model Elements	
Entity type	It represents a distinguishable object type. In real-world modelling, an entity type is an important business object that contains more than one property. An entity is a thing of significance, whether real or conceptual, about which the business or system being modelled needs to hold information. Entities are displayed as boxes on a diagram, which can display details such as attributes.
Entities	They can be described as being in a hierarchy, with children inheriting properties from their parents. Parent entities are called <i>super-types</i> , and child entities are called <i>sub-types</i> . A relationship type represents an association between or among several entities.
Table	A collection of records (rows) that have associated columns.
Relationship	It represents an association that needs to be remembered by the database system. A <i>relationship type</i> can be unary, binary, or n-ary, depending on whether the number of entities involved in the relationship is one, two or more than two.
Reference	It represents the link between a parent table and a child table. A reference can link tables by shared keys or by specified columns.
Attribute	An attribute is a property that is used to describe an entity or a relationship. An attribute that uniquely identifies an entity is called a <i>primary key</i> . An attribute that is a primary key of another relation is called a <i>foreign key</i> .
Cardinality Constraint	A cardinality constraint specifies the number of relationship instances in which an entity can participate. They are in the form of 1, 0..*, 1..*, in binary relationships, corresponding to one-to-one, zero-to-many and one-to-many respectively.

Table 2-1: Data Model Elements

2.1.4 Conventions

The following naming conventions are applied to naming entities.









ER – Entities Naming Conventions	
Cardinality 1 	<p>It signifies one-to-one relationship.</p> <p>The anchor at the end of a line signifies that the primary key of the entity "identifies" the other entity.</p>
Cardinality 0..* 	<p>It signifies zero-to-many relationship.</p> <p>The anchor at the end of a line signifies that the primary key of the entity "identifies" the other entity.</p>
Cardinality 1..* 	<p>It signifies one-to-many relationship.</p> <p>The anchor at the end of a line signifies that the primary key of the entity "identifies" the other entity.</p>
Cardinality 1..* 	<p>It signifies one-to-many on delete cascade relationship.</p> <p>The anchor at the end of a line signifies that the primary key of the entity "identifies" the other entity.</p>
ER – Attribute Naming Conventions	
_ID	A two-letter postfix defining the internal system unique identifier for an instance of the corresponding entity.
P, F, U	An indication of whether the column is used as part of the Primary Key (P) of the table and/or the Foreign Key (F) or the Unique Key (U).
	An indication of whether the column can hold null values (NOT NULL constraint).
ER – Constraint and Indexes Naming Conventions	
P 	A one-letter prefix/postfix defining the primary key.
U	A one-letter prefix/postfix defining the unique key.
F 	A one-letter prefix/postfix defining the foreign key.
IDX 	A three-letter postfix icon defining the index.

Table 2-2: ER – Naming Conventions

2.2 Physical Data Model (SSN-EIS)

The physical design diagrams of the SSN-EIS database schema are depicted in the following subsections. The contents and comments per table are presented in the subsequent sections.

2.2.1 Physical design diagrams

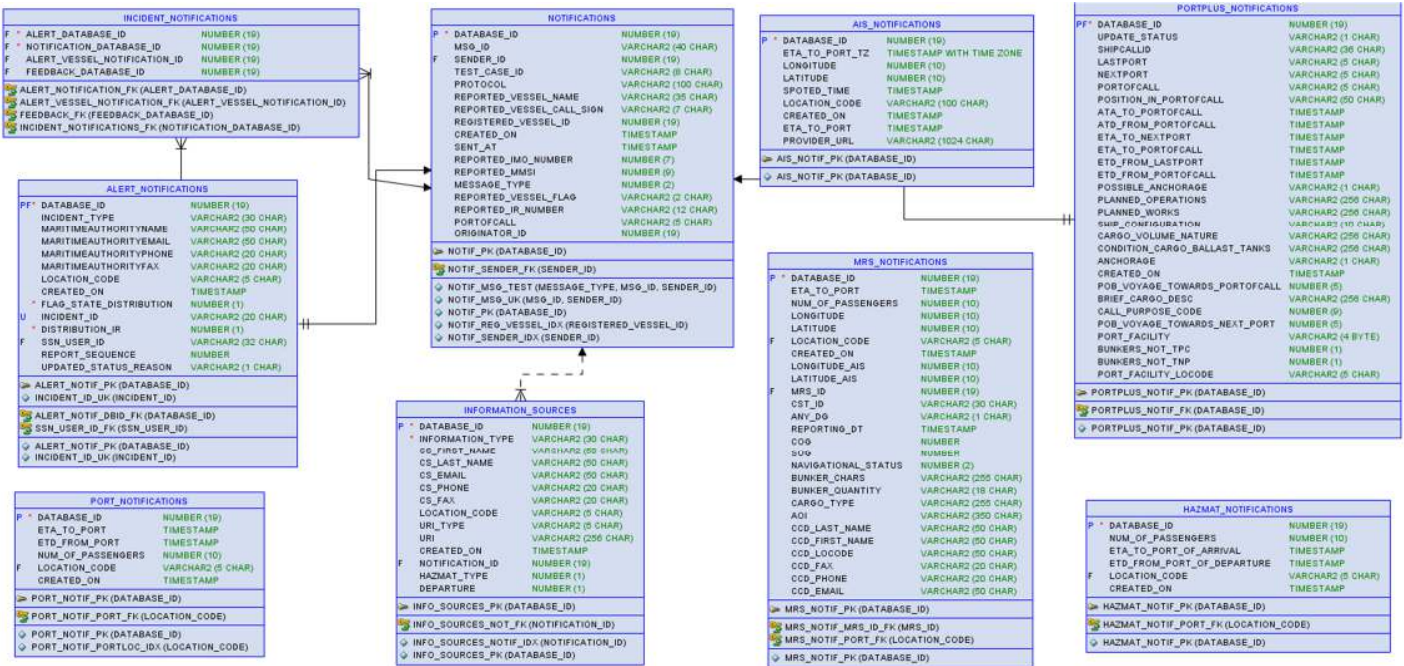


Figure 2-1 Notifications physical design diagram







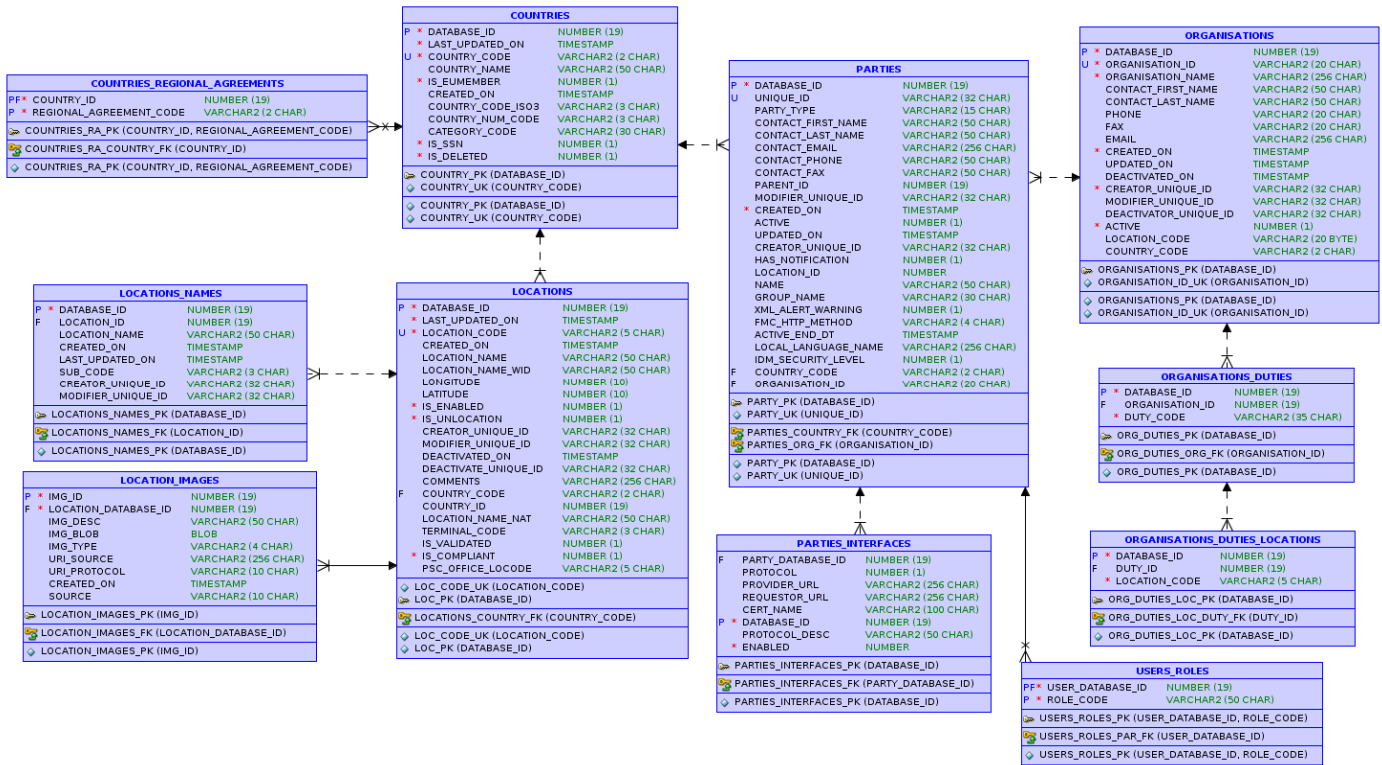


Figure 2-7 Parties, Locations, Countries physical design diagram

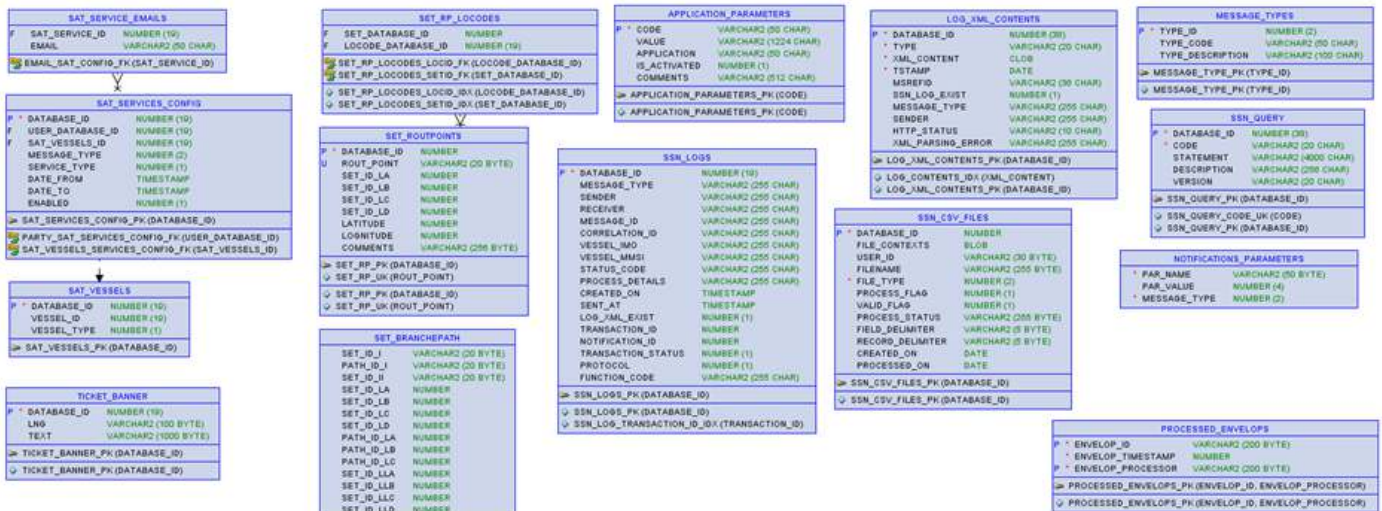


Figure 2-8 Various entities physical design diagram

2.2.2 Tables

This section lists all the tables contained in the SSN-EIS data model depicted in the previous subsection. For the detailed table contents please refer to the subsequent sections.

Table	Comment
AIS_NOTIFICATIONS	Holds attributes specific to AisNotifications
ALERT_ASSOCIATED_IR	Holds the association between the Incident (Alert) notification Id and the Incident Id.
ALERT_BANNED_SHIP	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type BannedShip.
ALERT_DISTRIBUTION_FAILED	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type FailedNotification.
ALERT_DISTRIBUTION_FILE	Incident (Alert) Distribution detail table. Holds the Incident (Alert) Distribution details electronic document.
ALERT_DISTRIBUTION_LOSTFOUND	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type LostFound.
ALERT_DISTRIBUTION_OTHERS	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type Others.
ALERT_DISTRIBUTION_POLREP	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type Polrep.
ALERT_DISTRIBUTION_RECIPIENTS	Incident (Alert) Distribution Recipients table. Holds the recipients that the Incident (Alert) notification that has been distributed.
ALERT_DISTRIBUTION_SITREP	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type Sitrep.

Table	Comment
ALERT_DISTRIBUTION_WASTE	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type Waste.
ALERT_FEEDBACK	Holds attributes specific to Feedback IR Distribution Notifications
ALERT_INSURANCE_FAILURE	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type InsuranceFailure.
ALERT_LOSTFOUND_CONTAINERS	Holds the containers per additional information of type LostFound.
ALERT_NOTIFICATION_VESSELS	Holds attributes specific to Vessel Identification of Incident (Alert) Distribution Notifications
ALERT_NOTIFICATIONS	Holds attributes specific to Incident (Alert) Distribution Notifications
ALERT_PILOT_OR_PORT_REPORT	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type PilotOrPortReport.
ALERT_POLREP_P49_OBSERVER	Holds the identity of the observers that reported the POLREP incident.
ALERT_POLREP_P52_STATE_ORG	Holds the name of the states and organizations informed about the POLREP incident if POLINF provided
ALERT_POLREP_P85_STATE_ORG	Holds the name of the states and organizations informed about the POLREP incident if POLFAC provided
ALERT_VTS_RULES_INFRINGEMENT	Incident (Alert) Distribution detail table. Holds the Additional Information of a distributed Incident (Alert) Notification of type VTSRulesInfringement.
APPLICATION_PARAMETERS	Holds application configuration parameters
ORGANISATIONS	Holds the COD organisations' registry.
ORGANISATIONS_DUTIES	Holds the duties assigned to COD organisations.

Table	Comment
ORGANISATIONS_DUTIES_LOCATIONS	Holds the locations assigned to organisations' duties.
AUTHORITY_TYPES	EMSA authority types
COUNTRIES	The countries table
COUNTRIES_REGIONAL_AGREEMENTS	Holds the regional agreements assigned to countries.
EXEMPTED_PORT_FACILITIES	Holds the port facilities per exemption notification
EXEMPTED_WASTE_TYPES	Holds the waste types per exemption notification
EXEMPTION_APPLIES_TO	Holds the port the exemption applies to
EXEMPTIONS	Holds attributes specific to Exemption Notifications
EXEMPTIONS_LOCODES	Holds the scheduled service LoCodes for the Exemption Notifications
INCIDENT_NOTIFICATIONS	Holds the association between the Incident (Alert) notification Id the reported incident, the feedback(s) and the notification message.
INFORMATION_SOURCES	Holds subclasses of the AdditionalInformationSource class. Defines the way notification details are provided and the source of notification details (e.g. phone and FAX of data provider or URL).
LOCATION_IMAGES	A storage for multimedia files related to a LOCATION. The files include pictures or video and are stored as BLOBs.
LOCATIONS	The locations table
LOCATIONS_NAMES	Holds the Location Names for a given Location_Id
LOG_XML_CONTENTS	Holds the XML content of the messages received.
MARITIME_ID_DIGITS	The Maritime Identification Digits
MESSAGE_TYPES	Holds type of messages defined in SSN

Table	Comment
MRS	Holds the Mandatory Reporting Systems (MRSs) reference list. The list contains the names of the systems registered in SSN.
MRS_COUNTRIES	Holds the list of Countries per MRS, entitled to provide MRS notifications.
MRS_CST	Holds the Coastal Stations (CSTs) per MRS responsible for receiving ship-to-shore MRS reports.
MRS_NOTIFICATIONS	Holds attributes specific to Mrs Notifications
MRS_NOTIFICATIONS_DG	Holds the list of DG reported per MRS Notification.
MSS_NOTIFICATIONS_DETAILS	Holds information on MS responses based on MSS tool configuration.
NOTIFICATIONS	The url where the organization receives AdditionalInformationRequests made by SSN
NOTIFICATIONS_PARAMETERS	Holds the period in calendar days that define the scope of queries for latest or relevant notification details.
PARTIES	Holds the actual users in SafeSeaNet. These can be human users as well as system users.
PARTIES_INTERFACES	Holds the interfaces per system users. .
PORTPLUS_CALL_PURPOSE	Holds the call purpose codes reported in the PortPlusNotification.
PORTPLUS_CREW_PASSENGERS	Holds the crew and passengers information for a given PortPlusNotification received. The crew and passengers data are classified by the DEPARTURE attribute that indicates if the data are at arrival to the PortOfCall or at departure from the PortOfCall.
PORTPLUS_INMARSAT_CALL_NUMBERS	Holds the Inmarsat call numbers for the ship reported in a PortPlusNotification.

Table	Comment
PORTPLUS_NOTIFICATIONS	Holds attributes specific to PortPlus Notifications. The notification details and the cargo manifest are information sources stored in the INFORMATION_SOURCES table. Holds also the Bunker information reported in the notification.
PORTPLUS_NOTIFICATIONS_DG	Holds the dangerous goods classification (IMO Code DG) for a given PortPlusNotifications
PORTPLUS_NOTIFICATIONS_HAZMAT	Holds the hazmat information for a given PortPlusNotifications. The Hazmat data are classified by the DEPARTURE attribute that indicates if the data is at arrival to the PortOfCall or at departure from the PortOfCall.
PORTPLUS_NOTIFICATIONS_MSGID	Holds the update notifications (UpdateMSRefId) for a given PortPlusNotifications
PORTPLUS_SECURITY	Holds the security information for a given PortPlusNotification received.
PORTPLUS_SHIP_ITENERARY	Holds the ship itinerary information associated with crew and passenger data received (in the case of cruise ships).
PORTPLUS_SHIP_PARTICULARS	Holds the ship particulars reported in a PortPlusNotification.
PORTPLUS_WASTE	Holds the waste information for a given PortPlusNotification received.
PORTPLUS_WASTE_DETAILS	Holds the waste detailed information for a given PortPlusNotification received.
PORTPLUS_WASTE_ITEM	Holds the waste item information for a given PortPlusNotification received.
PROCESSED_ENVELOPS	Holds the timestamp of the processing of a message
PROXIES	This table contains the list of all STIRES system's proxies.

Table	Comment
PROXIES_SOURCES	This table contains the STIRES system's proxies policies and preferences per sensor sources.
SAT_SERVICE_EMAILS	The ship activity tracking email recipients
SAT_SERVICES_CONFIG	The ship activity tracking configuration table
SAT_VESSELS	The ship activity tracking vessel identification
SET_BRANCHEPATH	The prediction plan algorithm definition of the rout point branches
SET_ROUTPOINTS	Stores the definition of the sets of Rout-Points used for the prediction of the voyage plan.
SET_RP_LOCODES	Store the relationship between the Sets of Rout-Point and locations. A location may belong to one or more sets of Rout-Points.
SHIP_PARTICULARS	The ship particulars tables - it stores the information of ship particulars notifications
SHIP_PARTICULARS_SUB	The ship particulars subscription tables - it stores the information of ship particulars subscriptions, wsa:ReplyTo
SHT_VESSELS	The uploaded SHT stage table
SSN_CSV_FILES	The uploaded CSV files
SSN_LOGS	Holds all the information that has been exchanged via EIS
TICKET_BANNER	Ticket Banner text to be displayed on the Web application header
USERS_ROLES	Holds the roles assigned to users.
VESSEL_DETAIL_HISTORY	Holds the update details of vessel particulars such as the reason and timestamp the updates became effective
VESSEL_DETAIL_VERSIONS	Holds versions about the details of a vessel
VESSEL_ENRICHMENT	This table contains the latest enrichment information per vessel: Voyage, Incidents and MRS.

Table	Comment
VESSEL_ENRICHMENT_ALERTS	This table contains the latest alerts information (enrichment) per vessel.
VESSEL_IMAGES	A storage for multimedia files related to a VESSELS. The files include pictures or video and are stored as BLOBs.
VESSEL_INMARSAT_NUMBERS	Holds the INMARSAT numbers reported for a given vessel in a PortPlus notification.
VESSEL_TEMP_DIVERGENCE	Holds the vessel particulars identified in the MarInfo database that diverge from those in the EIS OVR. Table populated based on the semiautomatic OVR update procedure.
VESSELS	The Vessels table
VOYAGE_BUNKERS	Holds the consolidated bunkers information associated with a voyage. The bunkers' data corresponding to the voyage are stored per voyage (i.e. the arrival data for the voyage towards PortOfCall, the departure data for the voyage towards NextPort).
VOYAGE_CREW_PASSENGERS	Holds the consolidated crew and passengers' information associated with a voyage. The crew and passengers' data corresponding to the voyage are stored per voyage (i.e. the arrival data for the voyage towards PortOfCall, the departure data for the voyage towards NextPort).

Table	Comment
VOYAGE_HAZMAT	<p>Holds the consolidated hazmat information associated with a voyage. The hazmat data corresponding to the voyage are stored per voyage (i.e. the arrival data for the voyage towards PortOfCall, the departure data for the voyage towards NextPort).</p> <p>The notification type that reported Hazmat is defined in the HAZMAT_MESSAGE_TYPE column (for backward compatibility this is preserved to distinguish v2 Hazmat from PortPlus notification).</p> <p>The actual PortPlusNotification is referenced by the HAZMAT_ID, while the DG classification information is referenced by the DG_DATABASE_ID column.</p>
VESSEL_INMARSAT_NUMBERS	Holds the INMARSAT numbers reported for a given vessel in a PortPlus notification associated with a voyage.
VOYAGE_NOTIFICATIONS	Holds the relationships of notifications and the voyages they define.
VOYAGE_SECURITY	Holds the consolidated security information associated with a voyage.
VOYAGE_SHIP_ITENERARY	Holds the ship itinerary associated with crew and passenger data (in the case of cruise ships) for a given voyage.
VOYAGE_WASTE	Holds the consolidated waste information associated with a voyage.

Table	Comment
VOYAGES	<p>Holds the vessel voyage details that correlate Port, PortPlus, Hazmat and Ship notifications based on the ship call and direction of the ship reported in these notifications.</p> <p>The table and the associated tables provide the consolidated voyage information incorporating all the information notified for the voyage (including the information on Hazmat related to it) and indication of Hazmat, pre-arrival, waste, security and crew & passengers if applicable. The Hazmat information, if available, may be provided either by the departure port or the arrival port of the voyage. The provider of the Hazmat information, the ShipCallID of the call that the Hazmat was reported, and the information source to be used for contacting the Hazmat data provider for retrieving the Hazmat details shall be recorded.</p> <p>The consolidated view discriminates the voyages by:</p> <ul style="list-style-type: none"> – arrival (hold consolidated pre-arrival and arrival details) and – departure (hold consolidated departure details).

Table 2-3: SSN-EIS List of Tables

The following subsections describe all the tables contained in the SSN-EIS physical data model.

2.2.2.1 Table AIS_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ETA_TO_PORT_TZ				TIMESTAMP WITH TIME ZONE	
LONGITUDE				NUMBER(10)	10
LATITUDE				NUMBER(10)	10
SPOTED_TIME				TIMESTAMP	

LOCATION_CODE				VARCHAR2(100 char)	100
CREATED_ON				TIMESTAMP	
ETA_TO_PORT				TIMESTAMP	
PROVIDER_URL				VARCHAR2(1024 char)	1024

2.2.2.2 Table ALERT_ASSOCIATED_IR

Code	Primary	Foreign Key	Mandatory	Data Type	Length
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
ASSOCIATED_IR_ID			X	VARCHAR2(20 char)	20

2.2.2.3 Table ALERT_BANNED_SHIP

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_DESCRIPTION				VARCHAR2(255 char)	255

2.2.2.4 Table ALERT_DISTRIBUTION_FAILED

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_DESCRIPTION				VARCHAR2(255 char)	255

2.2.2.5 Table ALERT_DISTRIBUTION_FILE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_NOT_FILE				BLOB	
CREATED_ON				TIMESTAMP	

2.2.2.6 Table ALERT_DISTRIBUTION_LOSTFOUND

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PORT_OF_DEPARTURE				VARCHAR2(5)	5
PORT_OF_DESTINATION				VARCHAR2(5)	5
TOTAL_PERSONS_ON_BOARD				VARCHAR2(5)	5
SHIP_LONGITUDE				VARCHAR2(9)	9
SHIP_LATITUDE				VARCHAR2(9)	9
URI				VARCHAR2(256)	256
DOC_TYPE				VARCHAR2(4)	4
P1_REPORT_TYPE				VARCHAR2(20)	20
P2_IMO_NUMBER				VARCHAR2(7)	7
P2_MMSI_NUMBER				VARCHAR2(9)	9
P2_CALL_SIGN				VARCHAR2(7)	7
P2_SHIP_NAME				VARCHAR2(35)	35
P3_LONGITUDE				VARCHAR2(9)	9
P3_LATITUDE				VARCHAR2(9)	9
P4_NUMBER_OF_CONTAINERS				VARCHAR2(5)	5
P5_TYPE_OF_GOODS				VARCHAR2(256)	256
DESCRIPTION				VARCHAR2(512)	512
CARGO_LEAKING				VARCHAR2(20)	20
WIND_SPEED				VARCHAR2(20)	20
WIND_DIRECTION				VARCHAR2(20)	20
TIDE_SPEED				VARCHAR2(20)	20
TIDE_DIRECTION				VARCHAR2(20)	20
WAVE_HEIGHT				VARCHAR2(20)	20
VISIBILITY				VARCHAR2(20)	20
DRIFT_COURSE				VARCHAR2(20)	20
DRIFT_SPEED				VARCHAR2(20)	20
CREATED_ON				TIMESTAMP	

P3_GEOGRAPHICAL_AREA				VARCHAR2(50 char)	50
P3_BEARING				VARCHAR2(20 char)	20
P3_DISTANCE				VARCHAR2(20 char)	20
P3_MARK				VARCHAR2(256 char)	256
P2_IR_NUMBER_FISHING_VESSEL				VARCHAR2(12 char)	12
P2_FLAG				VARCHAR2(2 char)	2
P2_OTHER				VARCHAR2(35 char)	35
REPORT_DATE_TIME				TIMESTAMP	

2.2.2.7 Table ALERT_DISTRIBUTION_OTHERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
OTHER_INFORMATION				VARCHAR2(256)	256
CREATED_ON				TIMESTAMP	

2.2.2.8 Table ALERT_DISTRIBUTION_POLREP

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PORT_OF_DEPARTURE				VARCHAR2(5)	5
PORT_OF_DESTINATION				VARCHAR2(5)	5
TOTAL_PERSONS_ON_BOARD				VARCHAR2(5)	5
SHIP_LONGITUDE				VARCHAR2(9)	9
SHIP_LATITUDE				VARCHAR2(9)	9
URI				VARCHAR2(256)	256
DOC_TYPE				VARCHAR2(4)	4
P1_DATETIME				TIMESTAMP	
P3_INCIDENT				VARCHAR2(256)	256
P4_OUTFLOW				VARCHAR2(80 char)	80

P5_ACKNOWLEDGE				VARCHAR2(20)	20
P2_LONGITUDE				VARCHAR2(9)	9
P2_LATITUDE				VARCHAR2(9)	9
P41_POLLUTION_POSITION				VARCHAR2(256 char)	256
P42_POLLUTION_CHARS				VARCHAR2(256)	256
P43_POLLUTION_SOURCE				VARCHAR2(256)	256
P44_WIND_SPEED				VARCHAR2(20)	20
P44_WIND_DIRECTION				VARCHAR2(20)	20
P45_TIDE_SPEED				VARCHAR2(20)	20
P45_TIDE_DIRECTION				VARCHAR2(20)	20
P46_WAVE_HEIGHT				VARCHAR2(20)	20
P46_VISIBILITY				VARCHAR2(20)	20
P47_DRIFT_COURSE				VARCHAR2(20)	20
P47_DRIFT_SPEED				VARCHAR2(20)	20
P48_POLLUTION_EFFECT_FORECAST				VARCHAR2(80 char)	80
P49_NAME				VARCHAR2(50)	50
P49_HOMEPORT				VARCHAR2(20)	20
P49_FLAG				VARCHAR2(20)	20
P49_CALL_SIGN				VARCHAR2(20)	20
P50_ACTION_TAKEN				VARCHAR2(20 char)	20
P51_PHOTOGRAPHS				VARCHAR2(80 char)	80
P52_NAME				VARCHAR2(1024 char)	1024
P53_OTHER_INFO				VARCHAR2(256 char)	256
P60_ACKNOWLEDGE				VARCHAR2(20)	20
P81_REQUEST_ASSISTANCE				VARCHAR2(256)	256
P82_COST				VARCHAR2(20 char)	20
P83_PREARRANGEMENTS				VARCHAR2(80 char)	80
P84_DELIVERY				VARCHAR2(256)	256

P85_NAME				VARCHAR2(1024 char)	1024
P86_CHANGE_OF_COM MAND				VARCHAR2(80)	80
P87_EXCHANGE_INFO				VARCHAR2(256)	256
P88_OTHER_INFO				VARCHAR2(20 char)	20
P99_ACKNOWLEDGE				VARCHAR2(20)	20
CREATED_ON				TIMESTAMP	
P40_DATETIME				TIMESTAMP	
P80_DATE_TIME				TIMESTAMP	
P1_DATETIME_TMP				TIMESTAMP	
P40_DATETIME_TMP				TIMESTAMP	
P80_DATE_TIME_TMP				TIMESTAMP	
P2_BEARING				VARCHAR2(255)	255
P2_DISTANCE				VARCHAR2(2255)	2255
P2_MARK				VARCHAR2(255)	255
P2_GEOGRAPHICAL_AR EA				VARCHAR2(50 char)	50

2.2.2.9 Table ALERT_DISTRIBUTION_RECIPIENTS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_DATABASE_ID				NUMBER(19)	19
RECIPIENT_ID		X	X	NUMBER(19)	19
ACKNOWLEDGED				NUMBER(1)	1
DISTRIBUTION_STATUS			X	NUMBER(1)	1
REQUESTED_ACTION_D ETAILS				VARCHAR2(256 char)	256
MSG_ID				VARCHAR2(40)	40

2.2.2.10 Table ALERT_DISTRIBUTION_SITREP

Code	Primary	Foreign Key	Mandatory	Data Type	Length
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DATABASE_ID	X	X	X	NUMBER(19)	19
PORT_OF_DEPARTURE				VARCHAR2(5)	5
PORT_OF_DESTINATION				VARCHAR2(5)	5
TOTAL_PERSONS_ON_BOARD				VARCHAR2(5)	5
SHIP_LONGITUDE				VARCHAR2(9)	9
SHIP_LATITUDE				VARCHAR2(9)	9
SITREP_ID				VARCHAR2(30)	30
A_CASUALTY_NAME				VARCHAR2(35)	35
A_CASUALTY_CALL_SIGN				VARCHAR2(7)	7
A_CASUALTY_FLAG				VARCHAR2(2)	2
B_POSITION_LONGITUDE				VARCHAR2(9)	9
B_POSITION_LATITUDE				VARCHAR2(9)	9
C_SITUATION_MESSAGE_TYPE				VARCHAR2(8)	8
C_SITUATION_NOTIFIED_AT				DATE	
C_SITUATION_NATURE				VARCHAR2(33 char)	33
D_NUMBER_OF_PERSONS				VARCHAR2(5)	5
E_ASSISTANCE_REQUIRED				VARCHAR2(20)	20
F_COORDINATING_RCC				VARCHAR2(80 char)	80
G_CASUALTY_DESCRIPTION				VARCHAR2(256)	256
H_WEATHER_ON_SCENE				VARCHAR2(20 char)	20
J_INITIAL_ACTIONS_TAKEN				VARCHAR2(256 char)	256
K_SEARCH_AREA				VARCHAR2(20 char)	20
L_COORDINATING_INSTRUCTIONS				VARCHAR2(256 char)	256
M_FUTURE_PLANS				VARCHAR2(20 char)	20

N_ADDITIONAL_INFO				VARCHAR2(256)	256
CREATED_ON				TIMESTAMP	

2.2.2.11 Table ALERT_DISTRIBUTION_WASTE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
VESSEL_FLAG				VARCHAR2(3)	3
WASTE_DELIVERY_DUE_PORT				VARCHAR2(5)	5
ETD				DATE	
INSPECTION_REASON				VARCHAR2(256)	256
DEFICIENCIES				VARCHAR2(256)	256
ACTION_TAKEN				VARCHAR2(256)	256
INSPECTION_AUTH_NAME				VARCHAR2(80)	80
INSPECTION_AUTH_COORDINATES				VARCHAR2(80)	80
NEXT_PORT_OF_CALL				VARCHAR2(5)	5
OTHER_AUTHORITIES				VARCHAR2(80)	80
CREATED_ON				TIMESTAMP	
PHONE				VARCHAR2(20 char)	20
FAX				VARCHAR2(20 char)	20
EMAIL				VARCHAR2(50 char)	50

2.2.2.12 Table ALERT_FEEDBACK

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_NOTIFICATION_ID		X	X	NUMBER(19)	19
FEEDBACK_ID			X	VARCHAR2(255 char)	255
DISTRIBUTION_FEEDBACK			X	NUMBER(1)	1

DETAILS				VARCHAR2(255 char)	255
AUTHORITY_NAME				VARCHAR2(255 char)	255
LOCODE				VARCHAR2(255 char)	255
PHONE				VARCHAR2(255 char)	255
FAX				VARCHAR2(255 char)	255
EMAIL				VARCHAR2(255 char)	255
URI_TYPE				VARCHAR2(5 char)	5
REP_ACTION_FILE				BLOB	
CREATED_ON			X	TIMESTAMP	
UPDATE_STATUS			X	VARCHAR2(4 char)	4
DATE_TIME_REPORT_A CTION				TIMESTAMP	
FLAG_STATE_DISTRIBU TION			X	NUMBER(1)	1
SSN_USER_ID				VARCHAR2(32 char)	32

2.2.2.13 Table ALERT_INSURANCE_FAILURE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_DESCRIPTOR				VARCHAR2(255 char)	255

2.2.2.14 Table ALERT_LOSTFOUND_CONTAINERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
DESCRIPTION				VARCHAR2(512)	512
CARGO_LEAKING				VARCHAR2(20)	20

2.2.2.15 Table ALERT_NOTIFICATION_VESSELS

Code	Primary	Foreign	Mandatory	Data Type	Length
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		Key			
DATABASE_ID	X	X	X	NUMBER(19)	19
ALERT_DATABASE_ID		X		NUMBER(19)	19
PORT_OF_DEPARTURE				VARCHAR2(20 char)	20
PORT_OF_DESTINATION				VARCHAR2(20 char)	20
TOTAL_PERSONS_ON_BOARD				NUMBER(5)	5
CREATED_ON				TIMESTAMP	
IR_LONGITUDE				NUMBER(10)	10
IR_LATITUDE				NUMBER(10)	10
IR_GEOGRAPHICAL_AREA				VARCHAR2(255 char)	255
IR_BEARING				VARCHAR2(255 char)	255
IR_DISTANCE				VARCHAR2(255 char)	255
IR_MARK				VARCHAR2(255 char)	255
REP_LONGITUDE				NUMBER(10)	10
REP_LATITUDE				NUMBER(10)	10
REP_GEOGRAPHICAL_AREA				VARCHAR2(255 char)	255
REP_BEARING				VARCHAR2(255 char)	255
REP_DISTANCE				VARCHAR2(255 char)	255
REP_MARK				VARCHAR2(255 char)	255
DESCRIBE_VESSEL				VARCHAR2(255 char)	255

2.2.2.16 Table ALERT_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_TYPE				VARCHAR2(30 char)	30
MARITIMEAUTHORITYNAME				VARCHAR2(50 char)	50
MARITIMEAUTHORITYEMAIL				VARCHAR2(50 char)	50
MARITIMEAUTHORITYPHONE				VARCHAR2(20 char)	20

ONE					
MARITIMEAUTHORITYFA X				VARCHAR2(20 char)	20
LOCATION_CODE				VARCHAR2(5 char)	5
CREATED_ON				TIMESTAMP	
FLAG_STATE_DISTRIBU TION			X	NUMBER(1)	1
INCIDENT_ID				VARCHAR2(20 char)	20
DISTRIBUTION_IR			X	NUMBER(1)	1
SSN_USER_ID				VARCHAR2(32 char)	32
REPORT_SEQUENCE				NUMBER	
UPDATED_STATUS_REA SON				VARCHAR2(1 char)	1

2.2.2.17 Table ALERT_PARAMETERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
INCIDENT_TYPE			X	VARCHAR2(30 char)	30
PAR_VALUE				NUMBER	

2.2.2.18 Table ALERT_PILOT_OR_PORT_REPORT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_DESCRIPTOR				VARCHAR2(255 char)	255

2.2.2.19 Table ALERT_POLREP_P49_OBSERVER

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
CALL_SIGN				VARCHAR2(20)	20
FLAG				VARCHAR2(20)	20

HOMEPORT				VARCHAR2(20)	20
NAME				VARCHAR2(50)	50

2.2.2.20 Table ALERT_POLREP_P52_STATE_ORG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
NAME				VARCHAR2(1024 char)	1024

2.2.2.21 Table ALERT_POLREP_P85_STATE_ORG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
NAME				VARCHAR2(1024 char)	1024

2.2.2.22 Table ALERT_VTS_RULES_INFRINGEMENT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INCIDENT_DESCRIPTION				VARCHAR2(512 char)	512

2.2.2.23 Table APPLICATION_PARAMETERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(50 char)	50
VALUE				VARCHAR2(1224 char)	1224
APPLICATION				VARCHAR2(50 char)	50
IS_ACTIVATED				NUMBER(1)	1
COMMENTS				VARCHAR2(512 char)	512

2.2.2.24 Table ORGANISATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ORGANISATION_ID			X	VARCHAR2(20 CHAR)	20
ORGANISATION_NAME			X	VARCHAR2(256 CHAR)	256
CONTACT_FIRST_NAME				VARCHAR2(50 CHAR)	50
CONTACT_LAST_NAME				VARCHAR2(50 CHAR)	50
PHONE				VARCHAR2(20 CHAR)	20
FAX				VARCHAR2(20 CHAR)	20
EMAIL				VARCHAR2(256 CHAR)	256
CREATED_ON			X	TIMESTAMP	
UPDATED_ON				TIMESTAMP	
DEACTIVATED_ON				TIMESTAMP	
CREATOR_UNIQUE_ID			X	VARCHAR2(32 CHAR)	32
MODIFIER_UNIQUE_ID				VARCHAR2(32 CHAR)	32
DEACTIVATOR_UNIQUE_ID				VARCHAR2(32 CHAR)	32
ACTIVE			X	NUMBER(1)	1
LOCATION_CODE				VARCHAR2(20 CHAR)	20
COUNTRY_CODE				VARCHAR2(2 CHAR)	2

2.2.2.25 Table ORGANISATIONS_DUTIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ORGANISATION_ID		X		NUMBER(19)	19
DUTY_CODE			X	VARCHAR2(35 CHAR)	35

2.2.2.26 Table ORGANISATIONS_DUTIES_LOCATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19

DUTY_ID		X		NUMBER(19)	19
LOCATION_CODE				VARCHAR2(5 CHAR)	5

2.2.2.27 Table COUNTRIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
LAST_UPDATED_ON			X	TIMESTAMP	
COUNTRY_CODE			X	VARCHAR2(2 char)	2
COUNTRY_NAME				VARCHAR2(50 char)	50
IS_EUMEMBER			X	NUMBER(1)	1
CREATED_ON				TIMESTAMP	
IS_SSN			X	NUMBER(1)	1
COUNTRY_CODE_ISO3				VARCHAR2(3 char)	3
COUNTRY_NUM_CODE				VARCHAR2(3 char)	3
CATEGORY_CODE				VARCHAR2(30 char)	30
IS_DELETED			X	NUMBER(1)	1

2.2.2.28 Table COUNTRIES_REGIONAL_AGREEMENTS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
COUNTRY_ID	X	X	X	NUMBER(19)	19
REGIONAL_AGREEMENT_CODE	X		X	VARCHAR2(2 char)	2

2.2.2.29 Table EXEMPTED_PORT_FACILITIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
EXEMPTION_APPLIES_TO_ID		X		NUMBER(19)	19
PORT_FACILITY_LOCODE				VARCHAR2(5 char)	5

PORT_FACILITY				VARCHAR2(4 char)	4
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2.2.2.30 Table EXEMPTED_WASTE_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
EXEMPTION_ID		X		NUMBER(19)	19
WASTE_CODE				VARCHAR2(4 char)	4
WASTE_DESCR				VARCHAR2(256 char)	256

2.2.2.31 Table EXEMPTION_APPLIES_TO

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
EXEMPTION_ID		X		NUMBER(19)	19
PORT				VARCHAR2(5 char)	5

2.2.2.32 Table EXEMPTIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
COMPANY_NAME				VARCHAR2(50 char)	50
GRANTING_COUNTRY_ID		X		NUMBER(19)	19
CONTACT_FIRST_NAME				VARCHAR2(50 char)	50
CONTACT_LAST_NAME				VARCHAR2(50 char)	50
CONTACT_EMAIL				VARCHAR2(50 char)	50
CONTACT_PHONE				VARCHAR2(20 char)	20
CONTACT_FAX				VARCHAR2(20 char)	20
CONTACT_LOCATION_ID		X		NUMBER(19)	19
VALID_FROM				DATE	
VALID_TO				DATE	

MODIFIER_ID		X		NUMBER(19)	19
UPDATED_ON				TIMESTAMP	
NOTIFICATION_TYPE			X	NUMBER(2)	2
EXEMPTION_ID				VARCHAR2(36 char)	36
REPORTED_VESSEL_FLAG				VARCHAR2(2 char)	2
GRANTING_AUTHORITY_NAME				VARCHAR2(100 char)	100
GRANTING_AUTHORITY_TYPE				VARCHAR2(20 char)	20

2.2.2.33 Table EXEMPTIONS_LOCODES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
EXEMPTION_ID	X	X	X	NUMBER(19)	19
LOCATION_ID	X	X	X	NUMBER(19)	19

2.2.2.34 Table HAZMAT_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
NUM_OF_PASSENGERS				NUMBER(10)	10
ETA_TO_PORT_OF_ARRIVAL				TIMESTAMP	
ETD_FROM_PORT_OF_DEPARTURE				TIMESTAMP	
LOCATION_CODE				VARCHAR2(5 char)	5
CREATED_ON				TIMESTAMP	

2.2.2.35 Table INCIDENT_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
ALERT_DATABASE_ID		X	X	NUMBER(19)	19
NOTIFICATION_DATABASE_ID		X	X	NUMBER(19)	19

SE_ID					
ALERT_VESSEL_NOTIFICATION_ID		X		NUMBER(19)	19
FEEDBACK_DATABASE_ID		X		NUMBER(19)	19

2.2.2.36 Table INFORMATION_SOURCES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
INFORMATION_TYPE			X	VARCHAR2(30 char)	30
CS_FIRST_NAME				VARCHAR2(50 char)	50
CS_LAST_NAME				VARCHAR2(50 char)	50
CS_EMAIL				VARCHAR2(50 char)	50
CS_PHONE				VARCHAR2(20 char)	20
CS_FAX				VARCHAR2(20 char)	20
LOCATION_CODE				VARCHAR2(5 char)	5
URI_TYPE				VARCHAR2(5 char)	5
URI				VARCHAR2(256 char)	256
CREATED_ON				TIMESTAMP	
NOTIFICATION_ID		X		NUMBER(19)	19
HAZMAT_TYPE				NUMBER(1)	1
DEPARTURE				NUMBER(1)	1

2.2.2.37 Table LOCATION_IMAGES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMG_ID	X		X	NUMBER(19)	19
LOCATION_DATABASE_ID		X	X	NUMBER(19)	19
IMG_DESC				VARCHAR2(50 char)	50
IMG_BLOB				BLOB	
IMG_TYPE				VARCHAR2(4 char)	4

URI_SOURCE				VARCHAR2(256 char)	256
URI_PROTOCOL				VARCHAR2(10 char)	10
CREATED_ON				TIMESTAMP	
SOURCE				VARCHAR2(10 char)	10

2.2.2.38 Table LOCATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
LAST_UPDATED_ON*			X	TIMESTAMP	
LOCATION_CODE*			X	VARCHAR2(5 char)	5
CREATED_ON*				TIMESTAMP	
LOCATION_NAME*				VARCHAR2(50 char)	50
LOCATION_NAME_NAT				VARCHAR2(50 char)	50
LOCATION_NAME_WID*				VARCHAR2(50 char)	50
TERMINAL_CODE				VARCHAR2(3 char)	3
LONGITUDE*				NUMBER(10)	10
LATITUDE*				NUMBER(10)	10
IS_ENABLED*			X	NUMBER(1)	1
IS_UNLOCATION*			X	NUMBER(1)	1
COUNTRY_ID		X		NUMBER(19)	19
IS_VALIDATED				NUMBER(1)	1
CREATOR_UNIQUE_ID*				VARCHAR2(32 char)	32
MODIFIER_UNIQUE_ID*				VARCHAR2(32 char)	32
DEACTIVATED_ON*				TIMESTAMP	
DEACTIVATE_UNIQUE_ID*				VARCHAR2(32 char)	32
COMMENTS*				VARCHAR2(256 char)	256
IS_COMPLIANT			X	NUMBER(1)	1
PSC_OFFICE_LOCODE				VARCHAR2(5 char)	5
COUNTRY_CODE*		X		VARCHAR2(2 CHAR)	2

* - Columns which are used by SSN-EIS application. Rest of location data is used by SSN-SI console.

2.2.2.39 Table LOCATIONS_NAMES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
LOCATION_ID		X		NUMBER(19)	19
LOCATION_NAME				VARCHAR2(50 char)	50
CREATED_ON				TIMESTAMP	
LAST_UPDATED_ON				TIMESTAMP	
SUB_CODE				VARCHAR2(3 char)	3
CREATOR_UNIQUE_ID				VARCHAR2(32 char)	32
MODIFIER_UNIQUE_ID				VARCHAR2(32 char)	32

2.2.2.40 Table LOG_XML_CONTENTS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
TYPE			X	VARCHAR2(20 char)	20
XML_CONTENT			X	CLOB	
TSTAMP			X	DATE	
MSREFID				VARCHAR2(36 char)	36
SSN_LOG_EXIST				NUMBER(1)	1
MESSAGE_TYPE				VARCHAR2(255 char)	255
SENDER				VARCHAR2(255 char)	255
HTTP_STATUS				VARCHAR2(10 char)	10
XML_PARSING_ERROR				VARCHAR2(255 char)	255

2.2.2.41 Table MARITIME_ID_DIGITS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DIGITS	X		X	VARCHAR2(3 char)	3

COUNTRY_NAME				VARCHAR2(256 char)	256
COUNTRY_FLAG				VARCHAR2(256 char)	256
COUNTRY_CODE				VARCHAR2(2 char)	2

2.2.2.42 Table MESSAGE_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
TYPE_ID	X		X	NUMBER(2)	2
TYPE_CODE				VARCHAR2(50 char)	50
TYPE_DESCRIPTION				VARCHAR2(100 char)	100

2.2.2.43 Table MRS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
MRS_ID	X		X	NUMBER(19)	19
MRS_IDENTIFICATION				VARCHAR2(50 char)	50

2.2.2.44 Table MRS_COUNTRIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
MRS_ID		X		NUMBER(19)	19
COUNTRY_ID		X		NUMBER(19)	19

2.2.2.45 Table MRS_CST

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CST_ID	X		X	VARCHAR2(30 char)	30
MRS_ID		X		NUMBER(19)	19
PARTIES_ID		X		NUMBER(19)	19

2.2.2.46 Table MRS_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length

DATABASE_ID	X		X	NUMBER(19)	19
ETA_TO_PORT				TIMESTAMP	
NUM_OF_PASSENGERS				NUMBER(10)	10
LONGITUDE				NUMBER(10)	10
LATITUDE				NUMBER(10)	10
LOCATION_CODE				VARCHAR2(5 char)	5
CREATED_ON				TIMESTAMP	
LONGITUDE_AIS				NUMBER(10)	10
LATITUDE_AIS				NUMBER(10)	10
MRS_ID		X		NUMBER(19)	19
CST_ID				VARCHAR2(30 char)	30
ANY_DG				VARCHAR2(1 char)	1
REPORTING_DT				TIMESTAMP	
COG				NUMBER	
SOG				NUMBER	
NAVIGATIONAL_STATUS				NUMBER(2)	2
BUNKER_CHARS				VARCHAR2(255 char)	255
BUNKER_QUANTITY				VARCHAR2(18 char)	18
CARGO_TYPE				VARCHAR2(255 char)	255
AOI				VARCHAR2(350 char)	350
CCD_LAST_NAME				VARCHAR2(50 char)	50
CCD_FIRST_NAME				VARCHAR2(50 char)	50
CCD_LOCODE				VARCHAR2(50 char)	50
CCD_FAX				VARCHAR2(20 char)	20
CCD_PHONE				VARCHAR2(20 char)	20
CCD_EMAIL				VARCHAR2(50 char)	50

2.2.2.47 Table MRS_NOTIFICATIONS_DG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID		X	X	NUMBER(19)	19
IMO_CLASS				VARCHAR2(7 char)	7

QUANTITY				VARCHAR2(18 char)	18
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2.2.2.48 Table MSS_NOTIFICATIONS_DETAILS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID			X	NUMBER(19)	19
MSG_ID			X	VARCHAR2(36 char)	36
SENDER_ID			X	NUMBER(19)	19
TEST_CASE_ID				VARCHAR2(8 char)	8
PROTOCOL				VARCHAR2(100 char)	100
REPORTED_VESSEL_NAME				VARCHAR2(35 char)	35
REPORTED_VESSEL_CALL_SIGN				VARCHAR2(7 char)	7
REGISTERED_VESSEL_ID				NUMBER(19)	19
CREATED_ON				TIMESTAMP	
SENT_AT				TIMESTAMP	
REPORTED_IMO_NUMBER				NUMBER(7)	7
REPORTED_MMSI				NUMBER(9)	9
MESSAGE_TYPE				NUMBER(2)	2
HAS_NOTIFICATIONS				NUMBER	
EXIST_REPLY				NUMBER	
REPLY_XML_CONTENTS				VARCHAR2(2000 char)	2000

2.2.2.49 Table NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
MSG_ID				VARCHAR2(40 char)	40
SENDER_ID		X		NUMBER(19)	19
TEST_CASE_ID				VARCHAR2(8 char)	8

PROTOCOL				VARCHAR2(100 char)	100
REPORTED_VESSEL_NAME				VARCHAR2(35 char)	35
REPORTED_VESSEL_CALL_SIGN				VARCHAR2(7 char)	7
REGISTERED_VESSEL_ID		X		NUMBER(19)	19
CREATED_ON				TIMESTAMP	
SENT_AT				TIMESTAMP	
REPORTED_IMO_NUMBER				NUMBER(7)	7
REPORTED_MMSI				NUMBER(9)	9
MESSAGE_TYPE				NUMBER(2)	2
REPORTED_VESSEL_FLAG				VARCHAR2(2 char)	2
REPORTED_IR_NUMBER				VARCHAR2(12 char)	12
PORTOFCALL				VARCHAR2(5 char)	5

2.2.2.50 Table NOTIFICATIONS_PARAMETERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
PAR_NAME			X	VARCHAR2(50)	50
PAR_VALUE				NUMBER(4)	4
MESSAGE_TYPE			X	NUMBER(2)	2

2.2.2.51 Table PARTIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
UNIQUE_ID*				VARCHAR2(32 char)	32
PARTY_TYPE*				VARCHAR2(15 char)	15
CONTACT_FIRST_NAME*				VARCHAR2(50 char)	50
CONTACT_LAST_NAME*				VARCHAR2(50 char)	50

CONTACT_EMAIL*				VARCHAR2(256 char)	50
CONTACT_PHONE*				VARCHAR2(50 char)	20
CONTACT_FAX*				VARCHAR2(50 char)	20
PARENT_ID		X		NUMBER(19)	19
MODIFIER_UNIQUE_ID*				VARCHAR2(32 char)	32
CREATED_ON			X	TIMESTAMP	
ACTIVE*				NUMBER(1)	1
UPDATED_ON				TIMESTAMP	
CREATOR_UNIQUE_ID*				VARCHAR2(32 char)	32
HAS_NOTIFICATION				NUMBER(1)	1
LOCATION_ID		X		NUMBER	
NAME				VARCHAR2(50 char)	50
GROUP_NAME		X		VARCHAR2(30 char)	30
XML_ALERT_WARNING				NUMBER(1)	1
FMC_HTTP_METHOD				VARCHAR2(4 char)	4
ACTIVE_END_DT				TIMESTAMP	
LOCAL_LANGUAGE_NAME				VARCHAR2(256 char)	256
IDM_SECURITY_LEVEL				NUMBER(1)	1
COUNTRY_CODE*		X		VARCHAR2(2 CHAR)	2
ORGANISATION_ID*		X		VARCHAR2(20 CHAR)	20

* - Columns which are filled in with values coming from the IdM provisioning. To note that **unique_id** is the user identifier as provided by IdM. Rest of parties' data is used by SSN-SI console.

2.2.2.52 Table PARTIES_INTERFACES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
PARTY_DATABASE_ID		X		NUMBER(19)	19
PROTOCOL				NUMBER(1)	1
PROVIDER_URL				VARCHAR2(256 char)	256
REQUESTOR_URL				VARCHAR2(256 char)	256
CERT_NAME				VARCHAR2(100 char)	100

DATABASE_ID	X		X	NUMBER(19)	19
PROTOCOL_DESC				VARCHAR2(50 char)	50

2.2.2.53 Table PORT_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
ETA_TO_PORT				TIMESTAMP	
ETD_FROM_PORT				TIMESTAMP	
NUM_OF_PASSENGERS				NUMBER(10)	10
LOCATION_CODE				VARCHAR2(5 char)	5
CREATED_ON				TIMESTAMP	

2.2.2.54 Table PORTPLUS_CALL_PURPOSES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
CALL_PURPOSE_CODE	X		X	NUMBER(9)	9

2.2.2.55 Table PORTPLUS_CREW_PASSENGERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
DEPARTURE	X		X	NUMBER(1)	1
HAS_CREW_PASSENGERS				VARCHAR2(1)	1
NUMBER_OF_CREW				NUMBER(10)	10
NUMBER_OF_PASSENGERS				NUMBER(10)	10

STOWAWAYS				NUMBER(1)	1
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2.2.2.56 Table PORTPLUS_INMARSAT_CALL_NUMBERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INMARSAT_NUMBER	X		X	VARCHAR2(50 char)	50

2.2.2.57 Table PORTPLUS_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
UPDATE_STATUS				VARCHAR2(1 char)	1
SHIPCALLID				VARCHAR2(36 char)	36
LASTPORT				VARCHAR2(5 char)	5
NEXTPORT				VARCHAR2(5 char)	5
PORTOFCALL				VARCHAR2(5 char)	5
POSITION_IN_PORTOFCALL				VARCHAR2(50 char)	50
ATA_TO_PORTOFCALL				TIMESTAMP	
ATD_FROM_PORTOFCALL				TIMESTAMP	
ETA_TO_NEXTPORT				TIMESTAMP	
ETA_TO_PORTOFCALL				TIMESTAMP	
ETD_FROM_LASTPORT				TIMESTAMP	
ETD_FROM_PORTOFCALL				TIMESTAMP	
POSSIBLE_ANCHORAGE				VARCHAR2(1 char)	1
PLANNED_OPERATIONS				VARCHAR2(256 char)	256
PLANNED_WORKS				VARCHAR2(256 char)	256
SHIP_CONFIGURATION				VARCHAR2(10 char)	10
CARGO_VOLUME_NATURE				VARCHAR2(256 char)	256

CONDITION_CARGO_BA LLAST_TANKS				VARCHAR2(256 char)	256
ANCHORAGE				VARCHAR2(1 char)	1
CREATED_ON				TIMESTAMP	
POB_VOYAGE_TOWARD S_PORTOFCALL				NUMBER(5)	5
BRIEF_CARGO_DESC				VARCHAR2(256 char)	256
CALL_PURPOSE_CODE				NUMBER(9)	9
POB_VOYAGE_TOWARD S_NEXT_PORT				NUMBER(5)	5
PORT_FACILITY				VARCHAR2(4)	4
BUNKERS_NOT_TPC				NUMBER(1)	1
BUNKERS_NOT_TNP				NUMBER(1)	1
PORT_FACILITY_LOCODE				VARCHAR2(5 char)	5

2.2.2.58 Table PORTPLUS_NOTIFICATIONS_DG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
DEPARTURE	X		X	NUMBER(1)	1
DG_CLASSIFICATION	X		X	VARCHAR2(20 char)	20

2.2.2.59 Table PORTPLUS_NOTIFICATIONS_HAZMAT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
DEPARTURE	X		X	NUMBER(1)	1
HAZMATONBOARD				VARCHAR2(1 char)	1
POB_VOYAGE_TOWARD S_PORTOFCALL				NUMBER(5)	5
INF_SHIP_CLASS				VARCHAR2(4 char)	4

2.2.2.60 Table PORTPLUS_NOTIFICATIONS_MSGID

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
UPD_MSG_ID	X		X	VARCHAR2(36 char)	36
DELETE_HAZMAT_ARRIVAL				NUMBER(1)	1
DELETE_HAZMAT_DEPARTURE				NUMBER(1)	1
DELETE_WASTE				NUMBER(1)	1
DELETE_SECURITY				NUMBER(1)	1
DELETE_BUNKERS_NOT_TPOC				NUMBER(1)	1
DELETE_BUNKERS_NOT_TNP				NUMBER(1)	1
DELETE_CREW_PAX_ARRIVAL				NUMBER(1)	1
DELETE_CREW_PAX_DEPARTURE				NUMBER(1)	1

2.2.2.61 Table PORTPLUS_SECURITY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
CURRENT_SHIP_SECURITY_LEVEL				VARCHAR2(20 char)	20
AGENT_NAME				VARCHAR2(256 char)	256
AGENT_PHONE				VARCHAR2(20 char)	20
AGENT_FAX				VARCHAR2(20 char)	20
AGENT_EMAIL				VARCHAR2(256 char)	256

2.2.2.62 Table PORTPLUS_SHIP_ITENERARY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID		X		NUMBER(19)	19

DEPARTURE		X		NUMBER(1)	1
PORT_OF_CALL				VARCHAR2(5 char)	5
DATE_OF_ARRIVAL				DATE	

2.2.2.63 Table PORTPLUS_SHIP_PARTICULARS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
SHIP_TYPE				VARCHAR2(3 char)	3
GROSS_TONAGE				NUMBER	
CERTIFICATE_OF_REGISTRY_DATE				TIMESTAMP	
CERTIFICATE_OF_REGISTRY_NUMBER				VARCHAR2(35 char)	35
CERTIFICATE_OF_REGISTRY_PORT				VARCHAR2(5 char)	5
CERTIFICATE_OF_REGISTRY_PNAME				VARCHAR2(256 char)	256
MNG_IMO_COMPANY_ID				NUMBER(7)	7
COMPANY_NAME				VARCHAR2(70 char)	70

2.2.2.64 Table PORTPLUS_WASTE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
LAST_PORT_DELIVERED				VARCHAR2(5 char)	5
LAST_PORT_DELIVERED_DATE				TIMESTAMP	
WASTE_DELIVERY_STATUS				VARCHAR2(50 char)	50

2.2.2.65 Table PORTPLUS_WASTE_DETAILS

Code	Primary	Foreign	Mandatory	Data Type	Length
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		Key			
DATABASE_ID	X	X	X	NUMBER(19)	19
PROVIDER_OF_LAST_UPDATE				VARCHAR2(32 char)	32
LAST_UPDATE_RECEIVED_AT				TIMESTAMP	

2.2.2.66 Table PORTPLUS_WASTE_ITEM

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PORT_DEL_REM_WASTE				VARCHAR2(5 char)	5
WASTE_CODE	X		X	VARCHAR2(4 char)	4
WASTE_DESCR				VARCHAR2(256 char)	256
TO_BE_DELIVERED_UNIT				VARCHAR2(3 char)	3
TO_BE_DELIVERED_MEASURE				VARCHAR2(18 char)	18
MAX_STORAGE_UNIT				VARCHAR2(3 char)	3
MAX_STORAGE_MEASURE				VARCHAR2(18 char)	18
RETAINED_ON_BOARD_UNIT				VARCHAR2(3 char)	3
RETAINED_ON_BOARD_MEASURE				VARCHAR2(18 char)	18
ESTIMATE_GENERATED_UNIT				VARCHAR2(3 char)	3
ESTIMATE_GENERATED_MEASURE				VARCHAR2(18 char)	18
DELIVERED_AT_LAST_PORT_UNIT				VARCHAR2(3 char)	3
DELIVERED_AT_LAST_PORT_MSR				VARCHAR2(18 char)	18

2.2.2.67 Table PROCESSED_ENVELOPS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
ENVELOP_ID	X		X	VARCHAR2(200)	200
ENVELOP_TIMESTAMP			X	NUMBER	
ENVELOP_PROCESSOR	X		X	VARCHAR2(200)	200

2.2.2.68 Table PROXIES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
DESCRIPTION				VARCHAR2(100 char)	100
PROXY_TYPE			X	CHAR	
STIRES_TX			X	CHAR(1 char)	1
MODIFIER_UNIQUE_ID				VARCHAR2(32 char)	32
CREATED_ON			X	TIMESTAMP	
UPDATED_ON				TIMESTAMP	
CREATOR_UNIQUE_ID				VARCHAR2(32 char)	32
COMMENTBLOCK_FILTER				VARCHAR2(512 char)	512
ORIGINATORS				VARCHAR2(512 char)	512
SHIPFLAG_FILTER			X	NUMBER(1)	1

2.2.2.69 Table PROXIES_SOURCES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
PROXY_ID	X	X	X	NUMBER(19)	19
SOURCE	X		X	VARCHAR2(50 char)	50
PREF_MESSAGES				VARCHAR2(512 char)	512
PREF_SHIP_TYPES				VARCHAR2(20 char)	20
PREF_SHIP_FLAGS				VARCHAR2(1200 char)	1200
PREF_DATA_AGE				NUMBER(6)	6
POLICY_MESSAGES				VARCHAR2(512 char)	512

RECIPIENT_MESSAGES				VARCHAR2(512 char)	512
ORIGINATORS				VARCHAR2(512 char)	512

2.2.2.70 Table SAT_SERVICE_EMAILS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
SAT_SERVICE_ID		X		NUMBER(19)	19
EMAIL				VARCHAR2(50 char)	50

2.2.2.71 Table SAT_SERVICES_CONFIG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
USER_DATABASE_ID		X		NUMBER(19)	19
SAT_VESSELS_ID		X		NUMBER(19)	19
MESSAGE_TYPE				NUMBER(2)	2
SERVICE_TYPE				NUMBER(1)	1
DATE_FROM				TIMESTAMP	
DATE_TO				TIMESTAMP	
ENABLED				NUMBER(1)	1

2.2.2.72 Table SAT_VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
VESSEL_ID		X		NUMBER(19)	19
VESSEL_TYPE				NUMBER(1)	1

2.2.2.73 Table SECURITY_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19

CREATED_ON				TIMESTAMP	
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2.2.2.74 Table SET_BRANCHPATH

Code	Primary	Foreign Key	Mandatory	Data Type	Length
SET_ID_I				VARCHAR2(20)	20
PATH_ID_I				VARCHAR2(20)	20
SET_ID_II				VARCHAR2(20)	20
SET_ID_LA				NUMBER	
SET_ID_LB				NUMBER	
SET_ID_LC				NUMBER	
SET_ID_LD				NUMBER	
PATH_ID_LA				NUMBER	
PATH_ID_LB				NUMBER	
PATH_ID_LC				NUMBER	
SET_ID_LLA				NUMBER	
SET_ID_LLB				NUMBER	
SET_ID_LLC				NUMBER	
SET_ID_LLD				NUMBER	

2.2.2.75 Table SET_ROUTEPOINTS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
ROUT_POINT				VARCHAR2(20)	20
SET_ID_LA				NUMBER	
SET_ID_LB				NUMBER	
SET_ID_LC				NUMBER	
SET_ID_LD				NUMBER	
LATITUDE				NUMBER	
LOGNITUDE				NUMBER	
COMMENTS				VARCHAR2(256)	256

2.2.2.76 Table SET_RP_LOCODES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
SET_DATABASE_ID		X		NUMBER	
LOCODE_DATABASE_ID		X		NUMBER	

2.2.2.77 Table SHIP_PARTICULARS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
MSG_ID				VARCHAR2(36 char)	36
SENDER_ID		X		NUMBER(19)	19
TEST_CASE_ID				VARCHAR2(8 char)	8
PROTOCOL				VARCHAR2(100 char)	100
REPORTED_IMO_NUMBER				NUMBER(7)	7
REPORTED_MMSI				NUMBER(9)	9
REPORTED_VESSEL_CALL_SIGN				VARCHAR2(7 char)	7
REPORTED_VESSEL_NAME				VARCHAR2(35 char)	35
REPORTED_VESSEL_FLAG				VARCHAR2(2 char)	2
REGISTERED_VESSEL_ID		X		NUMBER(19)	19
CREATED_ON				TIMESTAMP	
SENT_AT				TIMESTAMP	
MESSAGE_TYPE				NUMBER(2)	2
PROVIDER_URL				VARCHAR2(1024 char)	1024

2.2.2.78 Table SHIP_PARTICULARS_SUB

Code	Primary	Foreign Key	Mandatory	Data Type	Length
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DATABASE_ID	X		X	NUMBER(19)	19
MSG_ID			X	VARCHAR2(36 char)	36
SENDER_ID		X	X	NUMBER(19)	19
TEST_CASE_ID				VARCHAR2(8 char)	8
PROTOCOL				VARCHAR2(100 char)	100
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
SENT_AT				TIMESTAMP	
ANNOUNCEMENT_URL			X	VARCHAR2(256 char)	256
SSN_USER_ID				NUMBER(19)	19
DATE_FROM				TIMESTAMP	
DATE_TO				TIMESTAMP	
FLAG				VARCHAR2(2 char)	2
SERVICEINDICATOR				VARCHAR2(50 char)	50
IS_BANNED				NUMBER(1)	1
HULL_TYPE				VARCHAR2(20 char)	20
IS_DETAINED				NUMBER(1)	1
CANCELLATION_ID				VARCHAR2(36 char)	36

2.2.2.79 Table SHIP_TYPES_AIS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
PK_AIS_SHIP_TYPES_ID	X		X	NUMBER	
TRANSMISSION_CODE_AIS				NUMBER	
TRANSMISSION_CODE_CARGO				NUMBER	
TRANSMISSION_CODE_SPS				VARCHAR2(2 char)	2
DESCRIPTION				VARCHAR2(100 char)	100
CREATE_DT			X	DATE	
CREATE_USER_ID			X	NUMBER	
UPDATE_DT			X	DATE	

UPDATE_USER_ID			X	NUMBER	
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2.2.2.80 Table SHIP_TYPES_LMIU

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(10 char)	10
LABEL				VARCHAR2(50 char)	50

2.2.2.81 Table SHIP_TYPES_PSC

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(10 char)	10
LABEL				VARCHAR2(50 char)	50
CODE_SPS				VARCHAR2(10 char)	10

2.2.2.82 Table SHIP_TYPES_UN

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	NUMBER(10)	10
DESCRIPTION				VARCHAR2(255 char)	255
SHIP_TYPE				VARCHAR2(255 char)	255

2.2.2.83 Table SHT_VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
FILE_ID		X	X	NUMBER(19)	19
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
IMO				VARCHAR2(7)	7
MMSI				VARCHAR2(9)	9
CALL_SIGN				VARCHAR2(7)	7
NAME				VARCHAR2(35)	35

VESSEL_ID				NUMBER(19)	19
USER_ID				VARCHAR2(30)	30
EXISTS_FLAG			X	NUMBER(1)	1
UPDATE_FLAG				NUMBER(1)	1
FINALISE_FLAG				NUMBER(1)	1

2.2.2.84 Table SHT_VESSELS_EXT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMO				VARCHAR2(7 char)	7
MMSI				VARCHAR2(9 char)	9
CALL_SIGN				VARCHAR2(7 char)	7
NAME				VARCHAR2(35 char)	35

2.2.2.85 Table SSN_CSV_FILES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
FILE_CONTEXTS				BLOB	
USER_ID				VARCHAR2(30)	30
FILENAME				VARCHAR2(255)	255
FILE_TYPE			X	NUMBER(2)	2
PROCESS_FLAG				NUMBER(1)	1
VALID_FLAG				NUMBER(1)	1
PROCESS_STATUS				VARCHAR2(255)	255
FIELD_DELIMITER				VARCHAR2(5)	5
RECORD_DELIMITER				VARCHAR2(5)	5
CREATED_ON				DATE	
PROCESSED_ON				DATE	

2.2.2.86 Table SSN_LOGS

Code	Primary	Foreign	Mandatory	Data Type	Length
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		Key			
DATABASE_ID	X		X	NUMBER(19)	19
MESSAGE_TYPE				VARCHAR2(255 char)	255
SENDER				VARCHAR2(255 char)	255
RECEIVER				VARCHAR2(255 char)	255
MESSAGE_ID				VARCHAR2(255 char)	255
CORRELATION_ID				VARCHAR2(255 char)	255
VESSEL_IMO				VARCHAR2(255 char)	255
VESSEL_MMSI				VARCHAR2(255 char)	255
STATUS_CODE				VARCHAR2(255 char)	255
PROCESS_DETAILS				VARCHAR2(255 char)	255
CREATED_ON				TIMESTAMP	
SENT_AT				TIMESTAMP	
LOG_XML_EXIST				NUMBER(1)	1
TRANSACTION_ID				NUMBER	
NOTIFICATION_ID				NUMBER	
TRANSACTION_STATUS				NUMBER(1)	1
PROTOCOL				NUMBER(1)	1
FUNCTION_CODE				VARCHAR2(255 char)	255

2.2.2.87 Table SSN_QUERY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
CODE			X	VARCHAR2(20 char)	20
STATEMENT				VARCHAR2(4000 char)	4000
DESCRIPTION				VARCHAR2(256 char)	256
VERSION				VARCHAR2(20 char)	20

2.2.2.88 Table SSN_WEBUSERS_LOGS

Code	Primary	Foreign Key	Mandatory	Data Type	Length

DATABASE_ID	X		X	NUMBER(19)	19
USER_ID			X	VARCHAR2(50 char)	50
APPLICATION_NAME				VARCHAR2(512 char)	512
CREATED_ON				TIMESTAMP	

2.2.2.89 Table TICKET_BANNER

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
LNG				VARCHAR2(100)	100
TEXT				VARCHAR2(1000)	1000

2.2.2.90 Table USERS_ROLES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
USER_DATABASE_ID	X	X	X	NUMBER(19)	19
ROLE_CODE	X		X	VARCHAR2(100 char)	100

2.2.2.91 Table VESSEL_DETAIL_HISTORY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
VESSEL_DATABASE_ID				NUMBER(19)	19
VERSION_DATABASE_ID		X		NUMBER(19)	19
VESSEL_ATTRIBUTE				VARCHAR2(36 char)	36
DATE_EFFECT				TIMESTAMP	
REASON_FOR_UPDATE				VARCHAR2(255 char)	255
RELEVANT_LOG_ENTRY				VARCHAR2(12 char)	12
SOURCE				VARCHAR2(10 char)	10
DATE_EFFECT_IN_CSD				TIMESTAMP	

2.2.2.92 Table VESSEL_DETAIL_VERSIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
VESSEL_DATABASE_ID			X	NUMBER(19)	19
MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
IS_ACTIVATED				NUMBER(1)	1
IS_VALIDATED				NUMBER(1)	1
MARITIME_ID_DIGITS				VARCHAR2(12 char)	12
CREATED_ON			X	TIMESTAMP	
CREATOR_UNIQUE_ID			X	VARCHAR2(32 char)	32
UPDATED_ON				TIMESTAMP	
MODIFIER_UNIQUE_ID				VARCHAR2(32 char)	32
VALIDATED_ON				DATE	
IMO_NUMBER				NUMBER(7)	7
TYPE_OF_SHIP				VARCHAR2(35 char)	35
YEAR_OF_CONSTRUCTION				NUMBER(10)	10
GROSS_TONNAGE				NUMBER(10)	10
LENGTH				NUMBER(5,2)	5
BEAM				NUMBER(4,2)	4
FLAG_REGISTRY				VARCHAR2(2 char)	2
DEADWEIGHT				NUMBER	
SHIPTYPE_AISBASED				VARCHAR2(2 char)	2
SHIPTYPE_PSC				VARCHAR2(3 char)	3
SHIPTYPE_LMIUBASED				VARCHAR2(3 char)	3
KEEL_LAYING_DATE				TIMESTAMP	
SERVICEINDICATOR				VARCHAR2(50 char)	50
IS_BANNED				NUMBER(1)	1
IS_SINGLE_HULL_TANKER				NUMBER(1)	1

IS_DETAINED			NUMBER(1)	1
SHIP_RISK_PROFILE			VARCHAR2(3 char)	3
ELIGIBLE_FOR_BANNING			NUMBER(1)	1
ELIGIBLE_FOR_ESP_INP			NUMBER(1)	1
INSPECTION_PRIORITY			VARCHAR2(2 char)	2
IR_NUMBER			VARCHAR2(12 char)	12
XR_NUMBER			VARCHAR2(14 char)	14
ER_NUMBER			VARCHAR2(12 char)	12
FVP_FLAG			NUMBER(1)	1
SHIPTYPE_UN			VARCHAR2(10 char)	10
BREADTH			NUMBER(4,2)	4
CLASSSOCIETY			NUMBER(1)	1
EURECOGNISED			NUMBER(1)	1
HULLTYPE			VARCHAR2(10 char)	10
ICECLASS			VARCHAR2(10 char)	10
ISMCOMPANYNO			VARCHAR2(7 char)	7
KEELTOMASTHEIGHT			NUMBER(4,2)	4
LENGTHBETWEENPERPENDICULARS			NUMBER(5,2)	5
MAXMANOEUVRESPEED			NUMBER(5,2)	5
MAXNUMBERPASSENGERS			NUMBER(5)	5
MAXSPEED			NUMBER(5,2)	5
MOULDEDBREADTH			NUMBER(4,2)	4
MOULDEDEDEPTH			NUMBER(4)	4
NETTONNAGE			NUMBER(6)	6
NUMBOWTHRUSTERS			VARCHAR2(1 char)	1
NUMCARGOTANKS			NUMBER(6)	6
NUMOFHOLDS			NUMBER(6)	6
NUMROROCOMPARTMENTS			NUMBER(6)	6
NUMSTERNTHRUSTERS			VARCHAR2(1 char)	1

PMOURECOGNISED			NUMBER(1)	1
SHIPOWNERCOMPANYI MONUMBER			VARCHAR2(7 char)	7
TEU			NUMBER(5,2)	5
REASON_TO_UPDATE			VARCHAR2(24)	24
RELEVANT_LOG_ENTRY			VARCHAR2(12)	12
LEVEL_OF_CONFIDENCE			NUMBER(1)	1
REDUCEDGROSSTONNA GE			NUMBER(6)	6
SOURCE			VARCHAR2(10 char)	10
SHIPTYPE_LRIT			VARCHAR2(50)	50
SHIPTYPE_IHS			VARCHAR2(50 char)	50
CONTRACT_DATE			TIMESTAMP	
PSC_STATUS			VARCHAR2(50 char)	50
DRAUGHT			NUMBER(6,3)	6
HULL_SHAPE			VARCHAR2(50)	50
MAX_SERVICE_SPEED			NUMBER(5,2)	5
PROPULSION_TYPE			VARCHAR2(50 char)	50
MCR			NUMBER(10)	10
RPM			NUMBER(5)	5
FUEL_TYPE			VARCHAR2(50)	50
CONSTRUCTION_MATER IAL			VARCHAR2(50)	50
FISHING_GEAR			VARCHAR2(50 char)	50
NUMBER_OF_ALL_ENGI NES			NUMBER(10)	10
NUMBER_OF_MAIN_ENG INES			NUMBER(10)	10
MAIN_ENGINE_DESIGN ER			VARCHAR2(100)	100
SHAFT_GENERATOR			NUMBER(1)	1
ENGINE_MANUFACTURE R			VARCHAR2(255)	255
ENGINE_MODEL			VARCHAR2(50)	50

RECOGNISED_ORG				NUMBER(3)	3
REGISTERED_OWNER_ID				VARCHAR2(11 char)	11
ISM_COMPANY_ID				VARCHAR2(11 char)	11
NUMBER_OF_CREW				NUMBER(5)	5

2.2.2.93 Table VESSEL_IMAGES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMG_ID	X		X	NUMBER(19)	19
VESSEL_DATABASE_ID		X	X	NUMBER(19)	19
IMG_DESC				VARCHAR2(50 char)	50
IMG_BLOB				BLOB	
IMG_TYPE				VARCHAR2(4 char)	4
URI_SOURCE				VARCHAR2(256 char)	256
URI_PROTOCOL				VARCHAR2(10 char)	10
SOURCE				VARCHAR2(10 char)	10
CREATED_ON			X	TIMESTAMP	

2.2.2.94 Table VESSEL_INMARSAT_NUMBERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INMARSAT_NUMBER	X		X	VARCHAR2(50 char)	50

2.2.2.95 Table VESSEL_TEMP_DIVERGENCE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
SOURCE	X		X	VARCHAR2(20 char)	20
DIV_MMSI				NUMBER(9)	9
DIV_CALLSIGN				VARCHAR2(7 char)	7

DIV_SHIPNAME				VARCHAR2(35 char)	35
DIV_IMO				NUMBER(7)	7
UPDATED_ON				TIMESTAMP	

2.2.2.96 Table VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
IMO_NUMBER				NUMBER(7)	7
MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
IS_BANNED				NUMBER(1)	1
IS_SINGLE_HULL_TANKER				NUMBER(1)	1
HAS_NOTIFICATION				NUMBER(1)	1
IS_VALIDATED				NUMBER(1)	1
IS_ACTIVATED				NUMBER(1)	1
DATABASE_CREATED_ON			X	TIMESTAMP	
DATABASE_LAST_UPDATED_ON				TIMESTAMP	
FLAG_REGISTRY				VARCHAR2(2 char)	2
IS_DETAINED				NUMBER(1)	1
IR_NUMBER				VARCHAR2(12 char)	12
XR_NUMBER				VARCHAR2(14 char)	14
ER_NUMBER				VARCHAR2(12 char)	12
FVP_FLAG				NUMBER(1)	1
PROCESS_STATUS				NUMBER(1)	1
CSDID				NUMBER(19)	19
SERVICEINDICATOR				VARCHAR2(50)	50
HULLTYPE				VARCHAR2(10)	10
PSC_STATUS				VARCHAR2(50)	50

2.2.2.97 Table VESSELS_ENRICHMENT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
CSDID				NUMBER(19)	19
IMO_NUMBER				NUMBER(7)	7
MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
IR_NUMBER				VARCHAR2(12 char)	12
XR_NUMBER				VARCHAR2(14 char)	14
ER_NUMBER				VARCHAR2(12 char)	12
CREATED_ON			X	TIMESTAMP	
UPDATED_ON				TIMESTAMP	
FLAG_REGISTRY				VARCHAR2(2 char)	2
HAS_VOYAGE			X	NUMBER(1)	1
EIS_VOYAGE_ID				VARCHAR2(50 char)	50
ETA_TO_PORTOFCALL				TIMESTAMP	
ATA_TO_PORTOFCALL				TIMESTAMP	
ATD_FROM_PORTOFCALL				TIMESTAMP	
POSITION_IN_PORTOFCALL				VARCHAR2(50 char)	50
ETA_TO_NEXTPORT				TIMESTAMP	
POB_VOYAGE_TOWARDS_PORTOFCALL				VARCHAR2(5 char)	5
PORTOFCALL				VARCHAR2(5 char)	5
LASTPORT				VARCHAR2(5 char)	5
NEXTPORT				VARCHAR2(5 char)	5
HAZMATONBOARD				VARCHAR2(1 char)	1
WASTE_DELIVERY_STATUS				VARCHAR2(50 char)	50

CURRENT_SHIP_SECURITY_LEVEL				VARCHAR2(20 char)	20
HAS_INCIDENT			X	NUMBER(1)	1
HAS_MRS			X	NUMBER(1)	1
MRS_ID				VARCHAR2(50 char)	50
CST_ID				VARCHAR2(30 char)	30
LOCATION_CODE				VARCHAR2(5 char)	5
ETA_TO_PORT				TIMESTAMP	
NUM_OF_PASSENGERS				NUMBER(10)	10
LONGITUDE				NUMBER(10)	10
LATITUDE				NUMBER(10)	10
ANY_DG				VARCHAR2(1 char)	1
REPORTING_DT				TIMESTAMP	
SHIPCALLID				VARCHAR2(36 char)	36
HAS_BUNKERS				CHAR(1)	1

2.2.2.98 Table VESSELS_ENRICHMENT_ALERTS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
VESSEL_ID			X	NUMBER(19)	19
INCIDENT_TYPE				VARCHAR2(30 char)	30
INCIDENT_ID				VARCHAR2(20 char)	20
ALERT_SENT_AT				TIMESTAMP	

2.2.2.99 Table VOYAGE_BUNKERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
PROVIDER_ID				NUMBER(19)	19
SHIPCALLID				VARCHAR2(36 char)	36
NOTIFICATION_ID				NUMBER(19)	19

DEPARTURE				NUMBER(1)	1
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	

2.2.2.100 Table VOYAGE_CALL_PURPOSES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
CALL_PURPOSE_CODE	X		X	NUMBER(9)	9

2.2.2.101 Table VOYAGE_CREW_PASSENGERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PROVIDER_ID				NUMBER(19)	19
SHIPCALLID				VARCHAR2(36 char)	36
NUMBER_OF_CREW				NUMBER(10)	10
NUMBER_OF_PASSENGERS				NUMBER(10)	10
STOWAWAYS				NUMBER(1)	1
DEPARTURE			X	NUMBER(1)	1
NOTIFICATION_ID				NUMBER(19)	19
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
DEPARTURE2				NUMBER(1)	1

2.2.2.102 Table VOYAGE_HAZMAT

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
HAZMAT_PROVIDER_ID				NUMBER(19)	19
HAZMAT_SHIPCALLID				VARCHAR2(36 char)	36
INF_SHIP_CLASS				VARCHAR2(5 char)	5

DG_DATABASE_ID				NUMBER(19)	19
HAZMAT_ID				NUMBER(19)	19
HAZMAT_MESSAGE_TYPE				VARCHAR2(2 char)	2
DEPARTURE				NUMBER(1)	1
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	

2.2.2.103 Table VOYAGE_INMARSAT_CALL_NUMBERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INMARSAT_NUMBER	X		X	VARCHAR2(50 char)	50

2.2.2.104 Table VOYAGE_NOTIFICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VOYAGE_ID	X	X	X	NUMBER(19)	19
NOTIFICATION_ID	X	X	X	NUMBER(19)	19

2.2.2.105 Table VOYAGE_SECURITY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PROVIDER_ID				NUMBER(19)	19
SHIPCALLID				VARCHAR2(36 char)	36
CURRENT_SHIP_SECURITY_LEVEL				VARCHAR2(20 char)	20
AGENT_NAME				VARCHAR2(256 char)	256
AGENT_PHONE				VARCHAR2(20 char)	20
AGENT_FAX				VARCHAR2(20 char)	20
AGENT_EMAIL				VARCHAR2(256 char)	256
NOTIFICATION_ID				NUMBER(19)	19

CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	

2.2.2.106 Table VOYAGE_SHIP_PARTICULARS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
SHIP_TYPE				VARCHAR2(3 char)	3
GROSS_TONAGE				NUMBER	
CERTIFICATE_OF_REGISTRY_DATE				TIMESTAMP	
CERTIFICATE_OF_REGISTRY_NUMBER				VARCHAR2(35 char)	35
CERTIFICATE_OF_REGISTRY_PORT				VARCHAR2(5 char)	5
CERTIFICATE_OF_REGISTRY_PNAME				VARCHAR2(256 char)	256
MNG_IMO_COMPANY_ID				NUMBER(7)	7
COMPANY_NAME				VARCHAR2(70 char)	70

2.2.2.107 Table VOYAGE_WASTE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
PROVIDER_ID				NUMBER(19)	19
SHIPCALLID				VARCHAR2(36 char)	36
LAST_PORT_DELIVERED				VARCHAR2(5 char)	5
LAST_PORT_DELIVERED_DATE				TIMESTAMP	
WASTE_DELIVERY_STATUS				VARCHAR2(50 char)	50
NOTIFICATION_ID				NUMBER(19)	19
CREATED_ON				TIMESTAMP	

UPDATED_ON				TIMESTAMP	
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2.2.2.108 Table VOYAGES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
VESSEL_DATABASE_ID		X	X	NUMBER(19)	19
LASTPORT				VARCHAR2(5 char)	5
PORTOFCALL				VARCHAR2(5 char)	5
ETA_TO_PORTOFCALL				TIMESTAMP	
ETD_FROM_PORTOFCALL				TIMESTAMP	
NEXTPORT				VARCHAR2(5 char)	5
ATA_TO_PORTOFCALL				TIMESTAMP	
ATD_FROM_PORTOFCALL				TIMESTAMP	
ETA_TO_NEXTPORT				TIMESTAMP	
ETD_FROM_LASTPORT				TIMESTAMP	
POSITION_IN_PORTOFCALL				VARCHAR2(50 char)	50
POSSIBLE_ANCHORAGE				VARCHAR2(5 char)	5
PLANNED_OPERATIONS				VARCHAR2(256 char)	256
PLANNED_WORKS				VARCHAR2(256 char)	256
SHIP_CONFIGURATION				VARCHAR2(10 char)	10
CARGO_VOLUME_NATURE				VARCHAR2(256 char)	256
CONDITION_CARGO_BALLAST_TANKS				VARCHAR2(256 char)	256
ANCHORAGE				VARCHAR2(5 char)	5
SHIPCALLID				VARCHAR2(36 char)	36
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
STATUS				NUMBER(1)	1

HAZMATONBOARD				VARCHAR2(1 char)	1
DEPARTURE				NUMBER(1)	1
POB_VOYAGE_TOWARD S_PORTOFCALL				NUMBER(5)	5
DETECTED				NUMBER(1)	1
VOYAGE_ID				VARCHAR2(50 char)	50
SENDER_ID		X		NUMBER(19)	19
BRIEF_CARGO_DESC				VARCHAR2(256 char)	256
PORTCALL_PURPOSE				NUMBER(9)	9
POB_VOYAGE_TOWARD S_NEXT_PORT				NUMBER(5)	5
PROVIDER_LAST_UPDA TE				VARCHAR2(15 char)	15
HAS_CREW_PASSENGE RS				VARCHAR2(1 char)	1
HAS_SECURITY				VARCHAR2(1 char)	1
HAS_WASTE				VARCHAR2(1 char)	1
PORT_FACILITY				VARCHAR2(4 char)	4
HAS_BUNKERS				VARCHAR2(1 char)	1
PORT_FACILITY_LOCOD E				VARCHAR2(5 char)	5

2.2.3 References

The referential integrity constraints that are based on the relationships among master and detail tables or the relationships between tables and reference data tables (e.g. Location codes) are listed hereunder.

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
AD_RECIPIENT_FK	PARTIES	ALERT_DISTRIBUTION_RECIPIENTS	RECIPIENT_ID	0..*
ALERT_ASS_IR_FK	ALERT_NOTIFICATIONS	ALERT_ASSOCIATED_IR	ALERT_DATABASE_ID	0..*
ALERT_BANNED_SHIP_FK	INFORMATION_SOURCES	ALERT_BANNED_SHIP	DATABASE_ID	0..*
ALERT_DISTR_LFC_ID_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_LOSTFOUND	DATABASE_ID	0..*
ALERT_DISTR_OTHERS_ID_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_OTHERS	DATABASE_ID	0..*
ALERT_DISTR_POLREP_ID_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_POLREP	DATABASE_ID	0..*
ALERT_DISTR_SITREP_ID_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_SITREP	DATABASE_ID	0..*
ALERT_DISTR_WASTE_ID_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_WASTE	DATABASE_ID	0..*
ALERT_DISTRIBUTION_FAILED_FK	INFORMATION_SOURCES	ALERT_DISTRIBUTION_FAILED	DATABASE_ID	0..*
ALERT_FEEDBACK_ID_FK	ALERT_NOTIFICATIONS	ALERT_FEEDBACK	ALERT_NOTIFICATION_ID	0..*
ALERT_INSURANCE_FAILURE_FK	INFORMATION_SOURCES	ALERT_INSURANCE_FAILURE	DATABASE_ID	0..*
ALERT_LOSTFOUND_CONTAINERS_FK	ALERT_DISTRIBUTION_LOSTFOUND	ALERT_LOSTFOUND_CONTAINERS	ALERT_DATABASE_ID	0..*
ALERT_NOTIF_DBID_FK	NOTIFICATIONS	ALERT_NOTIFICATIONS	DATABASE_ID	0..*
ALERT_NOTIF_PORT_FK	LOCATIONS	ALERT_NOTIFICATIONS		0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
ALERT_NOTIF_VES_DBID_FK	NOTIFICATIONS	ALERT_NOTIFICATION_VESSELS	DATABASE_ID	0..*
ALERT_NOTIF_VESSEL_ALERT_FK	ALERT_NOTIFICATIONS	ALERT_NOTIFICATION_VESSELS	ALERT_DATABASE_ID	0..*
ALERT_NOTIFICATION_FK	ALERT_NOTIFICATIONS	INCIDENT_NOTIFICATIONS	ALERT_DATABASE_ID	0..*
ALERT_PILOT_OR_PORT_REPORT_FK	INFORMATION_SOURCES	ALERT_PILOT_OR_PORT_REPORT	DATABASE_ID	0..*
ALERT_POLREP_P49_OBSERVER_FK	ALERT_DISTRIBUTION_POLREP	ALERT_POLREP_P49_OBSERVER	ALERT_DATABASE_ID	0..*
ALERT_POLREP_P52_STATE_ORG_FK	ALERT_DISTRIBUTION_POLREP	ALERT_POLREP_P52_STATE_ORG	ALERT_DATABASE_ID	0..*
ALERT_POLREP_P85_STATE_ORG_FK	ALERT_DISTRIBUTION_POLREP	ALERT_POLREP_P85_STATE_ORG	ALERT_DATABASE_ID	0..*
ALERT_VESSEL_NOTIFICATION_FK	ALERT_NOTIFICATION_VESSELS	INCIDENT_NOTIFICATIONS	ALERT_VESSEL_NOTIFICATION_ID	0..*
ALERT_VTS_RULES_FK	INFORMATION_SOURCES	ALERT_VTS_RULES_INFRAINGEMENT	DATABASE_ID	0..*
AUTH_DUTIES_AUTH_FK	AUTHORITIES	AUTHORITIES_DUTIES	AUTHORITY_ID	0..*
AUTH_DUTIES_LOCATION_DUTY_FK	AUTHORITIES_DUTIES	AUTHORITIES_DUTIES_LOCATIONS	AUTHORITY_DUTY_ID	0..*
COUNTRIES_REGIONAL_COUNTRY_FK	COUNTRIES	COUNTRIES_REGIONAL_AGREEMENTS	COUNTRY_ID	0..*
COUNTRY_REL_COUNTRY_FK	COUNTRIES	COUNTRIES	PARENT_COUNTRY_ID	0..*
EMAIL_SAT_CONFIG_FK	SAT_SERVICES_CONFIG	SAT_SERVICE_EMAILS	SAT_SERVICE_ID	0..*
EXEMPTED_PORT_FACILITIES_FK	EXEMPTION_APPLIES_TO	EXEMPTED_PORT_FACILITIES	EXEMPTION_APPLIES_TO_ID	0..*
EXEMPTED_WASTE_TYPES_FK	EXEMPTIONS	EXEMPTED_WASTE_TYPES	EXEMPTION_ID	0..*
EXEMPTION_APPLIES_TO_FK	EXEMPTIONS	EXEMPTION_APPLIES_TO	EXEMPTION_ID	0..*
EXEMPTIONS_CONTACT_FK	LOCATIONS	EXEMPTIONS	CONTACT_LOCATION_ID	0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
EXEMPTIONS_COUNTRY_FK	COUNTRIES	EXEMPTIONS	GRANTING_COUNTRY_ID	0..*
EXEMPTIONS_EXEMPTION_FK	EXEMPTIONS	EXEMPTIONS_LOCODES	EXEMPTION_ID	0..*
EXEMPTIONS_LOCATION_FK	LOCATIONS	EXEMPTIONS_LOCODES	LOCATION_ID	0..*
EXEMPTIONS_MODIFIER_FK	PARTIES	EXEMPTIONS	MODIFIER_ID	0..*
FEEDBACK_FK	ALERT_FEEDBACK	INCIDENT_NOTIFICATIONS	FEEDBACK_DATABASE_ID	0..*
FEEDBACK_SOURCES_LOCODE_FK	LOCATIONS	ALERT_FEEDBACK		0..*
HAZMAT_NOTIFICATION_PORT_FK	LOCATIONS	HAZMAT_NOTIFICATIONS		0..*
INCIDENT_NOTIFICATIONS_FK	NOTIFICATIONS	INCIDENT_NOTIFICATIONS	NOTIFICATION_DATABASE_ID	0..*
INFO_SOURCES_LOCATION_FK	LOCATIONS	INFORMATION_SOURCES		0..*
INFO_SOURCES_NOTIFICATION_FK	NOTIFICATIONS	INFORMATION_SOURCES	NOTIFICATION_ID	0..*
LOCATION_IMAGES_FK	LOCATIONS	LOCATION_IMAGES	LOCATION_DATABASE_ID	0..*
LOCATIONS_COUNTRY_FK	COUNTRIES	LOCATIONS	COUNTRY_CODE	0..*
LOCATIONS_NAMES_FK	LOCATIONS	LOCATIONS_NAMES	LOCATION_ID	0..*
LOCATIONS_RL_LOCATION_FK	LOCATIONS	LOCATIONS	PSC_OFFICE_LOCODE	0..*
MID_RL_COUNTRY_FK	COUNTRIES	MARITIME_ID_DIGITS		0..*
MRS_COUNTRIES_COUNTRY_FK	COUNTRIES	MRS_COUNTRIES	COUNTRY_ID	0..*
MRS_COUNTRIES_MRS_FK	MRS	MRS_COUNTRIES	MRS_ID	0..*
MRS_CST_MRS_FK	MRS	MRS_CST	MRS_ID	0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
MRS_CST_PARTIES_FK	PARTIES	MRS_CST	PARTIES_ID	0..*
MRS_NOTIF_DG_FK	MRS_NOTIFICATIONS	MRS_NOTIFICATIONS_DG	DATABASE_ID	0..*
MRS_NOTIF_MRS_ID_FK	MRS	MRS_NOTIFICATIONS	MRS_ID	0..*
MRS_NOTIF_PORT_FK	LOCATIONS	MRS_NOTIFICATIONS		0..*
NOTIF_REG_VESSEL_FK	VESSELS	NOTIFICATIONS	REGISTERED_VESSEL_ID	0..*
NOTIF_SENDER_FK	PARTIES	NOTIFICATIONS	SENDER_ID	0..*
ORG_DUTIES_ORG_FK	ORGANISATIONS	ORGANISATIONS_DUTIES	ORGANISATION_ID	0..*
ORG_DUTIES_LOC_DUTY_FK	ORGANISATIONS_DUTIES	ORGANISATIONS_DUTIES_LOCATIONS	DUTY_ID	0..*
PARTIES_COUNTRY_FK	COUNTRIES	PARTIES	COUNTRY_CODE	0..*
PARTIES_ORG_FK	ORGANISATIONS	PARTIES	ORGANISATION_ID	0..*
PARTIES_INTERFACES_FK	PARTIES	PARTIES_INTERFACES	PARTY_DATABASE_ID	0..*
PARTY_SAT_SERVICES_CONFIG_FK	PARTIES	SAT_SERVICES_CONFIG	USER_DATABASE_ID	0..*
PORT_NOTIF_PORT_FK	LOCATIONS	PORT_NOTIFICATIONS		0..*
PORTPLUS_CALL_PURPOSES_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_CALL_PURPOSES	DATABASE_ID	0..*
PORTPLUS_CREW_PAX_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_CREW_PASSENGERS	DATABASE_ID	0..*
PORTPLUS_DG_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_NOTIFICATIONS_DG	DATABASE_ID	0..*
PORTPLUS_HAZMAT_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_NOTIFICATIONS_HAZMAT	DATABASE_ID	0..*
PORTPLUS_MSGID_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_NOTIFICATIONS_MSGID	DATABASE_ID	0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
PORTPLUS_NOTIF_FK	NOTIFICATIONS	PORTPLUS_NOTIFICATIONS	DATABASE_ID	0..*
PORTPLUS_SECURITY_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_SECURITY	DATABASE_ID	0..*
PORTPLUS_SHIP_ITENERARY_FK	PORTPLUS_CREW_PASSENGERS	PORTPLUS_SHIP_ITENERARY	DATABASE_ID; DEPARTURE	0..*
PORTPLUS_SHIP_PARTICULARS_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_SHIP_PARTICULARS	DATABASE_ID	0..*
PORTPLUS_WASTE_DETAILS_FK	PORTPLUS_WASTE	PORTPLUS_WASTE_DETAILS	DATABASE_ID	0..*
PORTPLUS_WASTE_FK	PORTPLUS_NOTIFICATIONS	PORTPLUS_WASTE	DATABASE_ID	0..*
PORTPLUS_WASTE_ITEM_FK	PORTPLUS_WASTE_DETAILS	PORTPLUS_WASTE_ITEM	DATABASE_ID	0..*
PP_INMARSAT_CALL_NUMBERS_FK	PORTPLUS_SHIP_PARTICULARS	PORTPLUS_INMARSAT_CALL_NUMBERS	DATABASE_ID	0..*
PROXIES_AREAS_PROXY_FK	PROXIES	PROXIES_SOURCES	PROXY_ID	0..*
SAT_VESSEL_ID_FK	VESSELS	SAT_VESSELS	VESSEL_ID	0..*
SAT_VESSELS_SERVICES_CONFIG_FK	SAT_VESSELS	SAT_SERVICES_CONFIG	SAT_VESSELS_ID	0..*
SET_RP_LOCODES_LOCID_FK	LOCATIONS	SET_RP_LOCODES	LOCODE_DATABASE_ID	0..*
SET_RP_LOCODES_SETID_FK	SET_ROUTPOINTS	SET_RP_LOCODES	SET_DATABASE_ID	0..*
SHIP_PARTICULARS_REG_VESSEL_FK	VESSELS	SHIP_PARTICULARS	REGISTERED_VESSEL_ID	0..*
SHIP_PARTICULARS_SENDER_FK	PARTIES	SHIP_PARTICULARS	SENDER_ID	0..*
SHIP_PARTICULARS_SUB_SENDER_FK	PARTIES	SHIP_PARTICULARS_SUB	SENDER_ID	0..*
SHT_VESSELS_FILE_FK	SSN_CSV_FILES	SHT_VESSELS	FILE_ID	0..*
SHT_VESSELS_USER_FK	PARTIES	SHT_VESSELS		0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
SSN_USER_ID_FK	PARTIES	ALERT_NOTIFICATIONS		0..*
USERS_ROLES_PARENT_FK	PARTIES	USERS_ROLES	USER_DATABASE_ID	0..*
VES_INMARSAT_NUMBERS_FK	VESSEL_DETAIL_VERSIONS	VESSEL_INMARSAT_NUMBERS	DATABASE_ID	0..*
VESSEL_DETAIL_VERSIONS_CUI_FK	PARTIES	VESSEL_DETAIL_VERSIONS	CREATOR_UNIQUE_ID	0..*
VESSEL_DETAIL_VERSIONS_MUI_FK	PARTIES	VESSEL_DETAIL_VERSIONS	MODIFIER_UNIQUE_ID	0..*
VESSEL_DETHIST_VERSIONID_FK	VESSEL_DETAIL_VERSIONS	VESSEL_DETAIL_HISTORY	VERSION_DATABASE_ID	0..*
VESSEL_IMAGES_FK	VESSELS	VESSEL_IMAGES	VESSEL_DATABASE_ID	0..*
VOY_CREW_PASSENGER_FK	VOYAGES	VOYAGE_CREW_PASSENGERS	DATABASE_ID	0..*
VOY_HAZMAT_VOY_FK	VOYAGES	VOYAGE_HAZMAT	DATABASE_ID	0..*
VOY_INMARSAT_CALL_NUMBERS_FK	VOYAGE_SHIP_PARTICULARS	VOYAGE_INMARSAT_CALL_NUMBERS	DATABASE_ID	0..*
VOY_NOTIFICATIONS_NOT_FK	NOTIFICATIONS	VOYAGE_NOTIFICATIONS	NOTIFICATION_ID	0..*
VOY_NOTIFICATIONS_VOY_FK	VOYAGES	VOYAGE_NOTIFICATIONS	VOYAGE_ID	0..*
VOY_SECURITY_FK	VOYAGES	VOYAGE_SECURITY	DATABASE_ID	0..*
VOY_WASTE_FK	VOYAGES	VOYAGE_WASTE	DATABASE_ID	0..*
VOYAGE_CALL_PURPOSES_FK	VOYAGES	VOYAGE_CALL_PURPOSES	DATABASE_ID	0..*
VOYAGE_SHIP_PARTICULARS_FK	VOYAGES	VOYAGE_SHIP_PARTICULARS	DATABASE_ID	0..*
VOYAGES_PORTOFCALL_FK	LOCATIONS	VOYAGES		0..*
VOYAGES_SENDER_FK	PARTIES	VOYAGES	SENDER_ID	0..*

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
VOYAGES_VESSEL_FK	VESSELS	VOYAGES	VESSEL_DATABASE_ID	0..*

Table 2-4 SSN EIS List of References

2.2.4 Views

The SSN-EIS views are depicted in the following diagram.

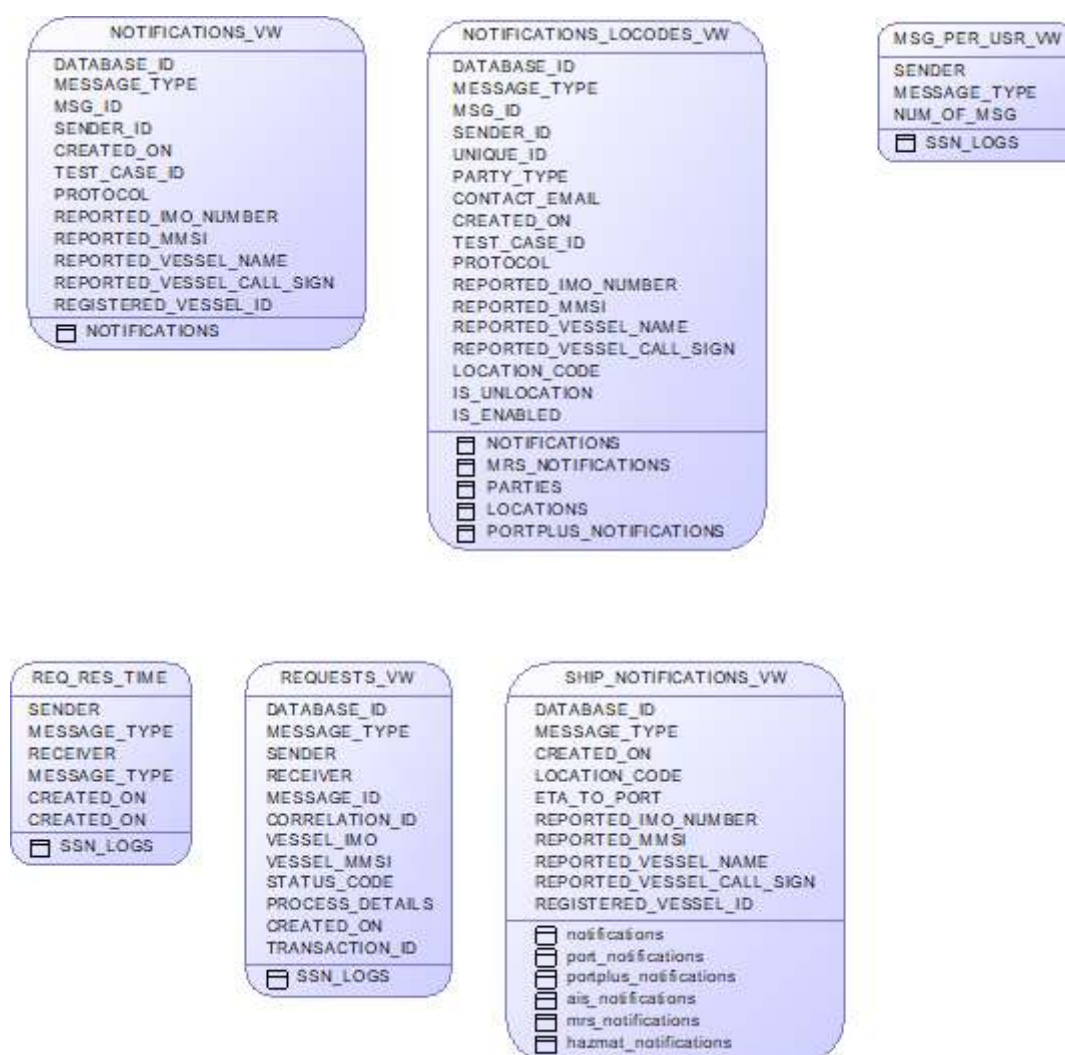




Figure 2-9 SSN-EIS Views

The list of views is presented hereunder.

View	Description
NOTIFICATIONS_LOCODES_VW	Provides the NOTIFICATIONS of type PortPlus, Port, Ship and Hazmat send by PARTIES in a de-normalised format. Used by the Temporary Locations per Notification report
NOTIFICATIONS_VW	Provides the NOTIFICATIONS of all MESSAGE_TYPES. User by the Notification Analysis reports.
MSW_PER_USR_VW	Provides the aggregated number of messages sent per PARTY per MESSAGE_TYPE
REQ_RES_TIME	For every request-response this view provides the timestamp when the MS2SSN request was received and the timestamp when the SSN2MS response was sent. User to report the average time between request and response messages.
REQUESTS_VW	Provides the requests for details sent by the data requestors for all MESSAGE_TYPES by PARTIES and search VESSELS. User by the Request Analysis reports.
SHIP_NOTIFICATIONS_VW	Provides the ship calls (ETA/ATA reporting notifications) per VESSEL. Used by the Find Information > List of ship calls.
VOYAGE_ARRIVAL_VW	Provides the voyages (ship calls) reporting the arrival of a ship to the PortOfCall. More specifically, it provides the consolidated view concerning the pre-arrival and arrival details for the "inbound" ship Call (this set utilises as sole input the PortPlus notifications provided by the port receiving the ship). This consolidated view includes Hazmat and Crew&Passengers notification information concerning the arrival of a ship to a port only if this information was reported to SSN by the port receiving the ship. Furthermore it shall include the security and waste information notified concerning the arrival. Note: The protocol to be utilised (SOAP or XML) for retrieving the Hazmat, Security, Waste and/or Crew&Passengers details can be found based on the HAZMAT_ID or SECURITY_ID or WASTE_ID or CREW_PASSENGERS_ID respectively. The "_ID" refers to the INFORMATION_SOURCE NOTIFICATION_ID of the data provider.

View	Description
VOYAGE_DEPARTURE_VW	<p>Provides the voyages (ship calls) reporting the departure of a ship to the PortOfCall towards the NextPort.</p> <p>More specifically, it provides the consolidated view of departure details concerning a ship call. This data set will include, if made available, the Hazmat and Crew&Passengers notification information provided by the port that the vessel is departing (concerning the outbound voyage from the port the vessel is departing).</p> <p>Note: The protocol to be utilised (SOAP or XML) for retrieving the Hazmat and/or Crew&Passengers details can be found based on the HAZMAT_ID or CREW_PASSENGERS_ID respectively. The "_ID" refers to the INFORMATION_SOURCE NOTIFICATION_ID of the data provider.</p>

Table 2-5: SSN-EIS List of Views

2.2.5 Synonyms

External data sources are referenced via the SYNONYMS defined hereunder.

Synonym	Comments
MARINFO_LOTA_MAX	<p>Object Name: MARINFO_LOTA_MAX</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>
MARINFO_LOTA_MIN	<p>Object Name: MARINFO_LOTA_MIN</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>
MARINFO_LOTB_MAX	<p>Object Name: MARINFO_LOTB_MAX</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>
MARINFO_LOTB_MIN	<p>Object Name: MARINFO_LOTB_MIN</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>
MARS_VESSELS	<p>Object Name: MARS_VESSELS</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>
PCK_ACCESS_CONTROL	<p>Object Name: PCK_ACCESS_CONTROL</p> <p>Object Owner: STIRES_SCHEMA</p> <p>Object Type: Package</p>
PCK_BB_UTILITY	<p>Object Name: PCK_BB_UTILITY</p> <p>Object Owner: STIRES_SCHEMA</p> <p>Object Type: Package</p>
REF_CSD_SOURCE_APPLICATIONS	<p>Object Name: CSD_SOURCE_APPLICATIONS</p> <p>Object Owner: REF_ADMIN</p> <p>Object Type: Table</p>

Synonym	Comments
REF_CSD_SOURCE_RFU_SEQ	Object Name: CSD_SOURCE_RFU_SEQ Object Owner: REF_ADMIN Object Type: Sequence
REF_CSD_SOURCES	Object Name: REF_CSD_SOURCES Object Owner: REF_ADMIN Object Type: Table
REF_CSD_SOURCES_SEQ	Object Name: CSD_SOURCES_SEQ Object Owner: REF_ADMIN Object Type: Sequence
REF_CSD_SRC_APPLICATIONS_SEQ	Object Name: CSD_SOURCE_APPLICATIONS_SEQ Object Owner: REF_ADMIN Object Type: Sequence
REF_CSD_SRC_REASON_FOR_UPDATE	Object Name: CSD_SOURCE_REASON_FOR_UPDATE Object Owner: REF_ADMIN Object Type: Table
REF_CSV_FILES_SEQ	Object Name: CSD_CSV_FILES_SEQ Object Owner: REF_ADMIN Object Type: Sequence
REF_MARS_VESSELS_STG	Object Name: MARS_VESSELS_STG Object Owner: REF_ADMIN Object Type: Table
REF_MS_VESSELS	Object Name: MS_VESSELS Object Owner: REF_ADMIN Object Type: Table
REF_RVR_CSD_AIS_SHIP_TYPES	Object Name: CSD_AIS_SHIP_TYPES Object Owner: REF_ADMIN Object Type: Table
REF_RVR_CSD_SHIP_TYPES	Object Name: CSD_SHIP_TYPES Object Owner: REF_ADMIN Object Type: Table
REF_RVR_CSD_SHIP_TYPES_UN	Object Name: CSD_SHIP_TYPES_UN Object Owner: REF_ADMIN Object Type: Table
REF_RVR_IMAGES	Object Name: CSD_IMAGES Object Owner: REF_ADMIN Object Type: Table
REF_RVR_LMIU_SHIP_TYPES	Object Name: CSD_LMIU_SHIP_TYPES Object Owner: REF_ADMIN Object Type: Table
REF_RVR_PSC_SHIP_TYPES	Object Name: CSD_PSC_SHIP_TYPES Object Owner: REF_ADMIN Object Type: Table
REF_RVR_VES_OWNER	Object Name: CSD_VES_OWNER Object Owner: REF_ADMIN Object Type: Table

Synonym	Comments
REF_RVR_VESSEL_DETAILS_HISTORY	Object Name: CSD_VESSEL_DETAIL_HISTORY Object Owner: REF_ADMIN Object Type: Table
REF_RVR_VESSEL_DETAIL_VERSIONS	Object Name: CSD_VESSEL_DETAIL_VERSIONS Object Owner: REF_ADMIN Object Type: Table
REF_RVR_VESSEL_FLAG_VERSIONS	Object Name: CSD_VESSEL_FLAG_VERSIONS Object Owner: REF_ADMIN Object Type: Table
REF_RVR_VESSELS	Object Name: CSD_VESSELS Object Owner: REF_ADMIN Object Type: Table
REF_SOURCE_PARTICULARS_DET_SEQ	Object Name: CSD_SOURCE_PARTICULARS_DET_SEQ Object Owner: REF_ADMIN Object Type: Sequence
REF_SOURCE_PARTICULARS_DETAILS	Object Name: REF_SOURCE_PARTICULARS_DETAILS Object Owner: REF_ADMIN Object Type: Table
REF_SSN_CSV_FILES	Object Name: SSN_CSV_FILES Object Owner: REF_ADMIN Object Type: Table
REF_SSN_RVR_MNG_PKG	Object Name: SSN_RVR_MNG_PKG Object Owner: REF_ADMIN Object Type: Package

Table 2-6: List of Synonyms

2.2.6 Packages and functions

The list of packages and functions is presented hereunder.

Package	Description
SSN_CSV_FILES_PKG	Provides the functionality necessary for the SSN CSV uploaded files.
SSN_EIS_STIRES_PKG	Provides STIRES with enrichment data, that is notification and vessel specific data upon request.
SSN_NOTIFICATION_MNG_PKG	Performs notification management: <ul style="list-style-type: none"> • Get the details of the latest relative Ship Notifications. • Voyage consolidation procedure based on the reported PortPlus notifications. The consolidation takes as input the PortPlus notifications and its contents including the hazmat, Waste, Security and Crew & Passengers information reported. The data are consolidated with previously reported PortPlus notifications based on the

Package	Description
	<p>ShipCallId. A voyage is created for the arrival to the PortOfCall and a voyage in case of departure/for the voyage towards NextPort. The Hazmat, Security, Waste and Crew & Passengers information are correlated with the arrival (towards PortOfCall) or the departure (towards NextPort) voyages.</p> <ul style="list-style-type: none"> • Set the active Hazmat reported in a PortPlus notification. • Set the status of voyages to closed based on the ETA and ATA criteria. • Get details relevant to ShipCalls for a given vessel of vessels by registered flag. The information expected depend on the <i>GetDetails</i> parameter of the corresponding <i>MS2SSN_ShipCall_Req</i> message defined in the <i>MS2SSN_ShipCall_Req</i> message. Possible choices <ul style="list-style-type: none"> 1 = <i>ExpectedCallOfSelectedShip</i> 2 = <i>MostRecentArrivalOfSelectedShip</i> 3 = <i>MostRecentDepartureOfSelectedShip</i> 4 = <i>RecentAndCurrentShipCallsOfSelectedShip</i> 5 = <i>ExpectedShipCallsAtEUPort</i> 6 = <i>CurrentShipCallsAtEUPort</i> 7 = <i>CompletedShipCallsAtEUPort</i> 8 = <i>LatestRegisteredShipCallDataOfSpecificShip</i> (DEPRECATED) 9 = <i>ShipCallsRegisteredBySSNYesterday</i> 10 = <i>LatestCallUpdates</i> 11 = <i>LatestCallInfoAtSpecificPort</i> (DEPRECATED) 12 = <i>ListExpectedCallsOfSelectedShip</i> 13 = <i>GetActiveHazmatForSelectedShip</i> 14 = <i>GetCurrentVoyageOfSelectedShip</i> 15 = <i>GetAllReportedVoyagesOfSelectedShip</i> 19 = <i>GetCurrentAndPreviousVoyageOfSelectedShipAtTimeStAMP</i> 20 = <i>GetActiveWasteForSelectedShip</i> 21 = <i>GetActiveSecurityForSelectedShip</i> 22 = <i>GetActiveCrewPassengersForSelectedShip</i> 23 = <i>GetVoyageforSSNVoygeID</i> 25 = <i>GetExpectedandLastTenCalls</i> 26 = <i>GetActiveBunkersForSelectedShip</i>

Package	Description
	<p>113 = <i>SelectedShipCall</i></p> <p>114 = <i>RelevantNotifications</i> to become (replaces 14) GIDD-v0.90 Improvement of relevant notifications</p> <p>115 = <i>RelevantNotifications</i> (Voyages) detected by STIRES (detected=1)</p> <p>116 = <i>SearchByShipCallId</i> MS Voyage that corresponds to voyage detected by STIRES</p> <p>NOTE: 1, 2, 3, 8, 13, 14, 20, 21, 22, 23, 26, 113 will return 1 relevant ShipCall and the corresponding Hazmat/Security/Waste/Crew&Pax information (summary or details).</p>
SSN_OVR_SYNC_PKG	<p>Perform vessel management:</p> <ul style="list-style-type: none"> Update the Operational Vessel repository based on the newly updated RVR data. Automatically compare the new vessel records created in EIS OVR during the last day against the vessel records stored at the MarInfo DB. Differences will be stored in a stage area, an operator via the Management Console will verify and accept differences.
SSN_PATH_PREDICT_PKG	For a given starting and ending LOCODEs return the INCIDENT_REP_RECIPIENT PARTIES along the predicted rout plan of a given vessel.
SSN_PROXY_MNG_PKG	Provides for the retrieval of proxies specific data, areas covered by proxies and associated parties.
SSN_UTILS_PKG	<p>To provide useful functions:</p> <ul style="list-style-type: none"> Create/Submit a job Schedule a job when to run check and purge the size of TLOG table Synchronize the LOG_XML_CONTENTS CTX INDEX Create a record on SSN_LOGS table
SSN_VESSEL_ENRICHMENT_PKG	Updates the enrichment based on the notifications / voyages received the last n minutes for vessels having CSDID.
SSN_VESSEL_MNG_PKG	<p>Perform vessel management:</p> <ul style="list-style-type: none"> Delete from the vessel registry the records of the vessels classified as temporary for a specified time slot. Process the uploaded data with SHT vessels Process the uploaded data with SHT vessels

Package	Description
	<ul style="list-style-type: none"> Update the Vessel in the OVR based on the user input from the Validation and verification procedure. Compare the vessel reported on a received notification against EIS OVR.
SSN_VOYAGE_SCAN_PKG	Scan for voyages to be propagated to a list of recipients. Part of the SSN integration with IMDaTe.
EXTRACT_DAYS_IN_SEC_SF	Function used to extract the seconds from a date range - from to.
IN_LIST	Function used to return a nested table type (of varchar values) given a string input.
IN_NUMBER_LIST	Function used to return a nested table type (of numeric values) given a string input.

Table 2-7: List of Packages and fucntions

2.2.7 Data Consistency

Data consistency rules are enforced by the referential integrity constraints that specify the relationships among primary keys and foreign keys of different tables. That includes the referential integrity constraints between the master and detail tables (e.g. NOTIFICATIONS and AIS_NOTIFICATIONS) as well as the referential integrity constraints with the reference data tables (e.g. COUNTRIES).

Furthermore, the Oracle data consistency management ensures that each user sees a consistent view of the data, including visible changes made by the user's own transactions and transactions of other users.

2.2.8 SSN XML Messages Description

For the exchange of data between the Member States and the EIS, XML messages will be used. The format of the XML messages is defined in the XML Reference Guide [R4].

The Member States must transmit data to the EIS in the form of XML messages that are bound to the corresponding XML schema "ssn_4_0.xsd".

2.3 Physical Data Model (STIRES_SCHEMA) - DEPRECATED

The updated physical design diagram of the STIRES_SCHEMA database schema objects is depicted in the following subsection.

2.3.1 Physical design diagrams



Figure 2-10 Vessels and Notifications tables

VESSEL_TRACKS		
OBJECTID	NUMBER	<pk>
CONTACT_DT	DATE	
SOURCE_TYPE	VARCHAR2(50 char)	
SENT_MMSI_NUMBER	NUMBER(10)	
SENT_IMO_NUMBER	NUMBER(10)	
SENT_SHIP_NAME	VARCHAR2(35 char)	
SENT_CALL_SIGN	VARCHAR2(7 char)	
SENT_IR_NUMBER	VARCHAR2(12 char)	
SENT_XR_NUMBER	VARCHAR2(14 char)	
LENGTH	NUMBER(5,1)	
SHIP_TYPE	NUMBER(2)	
PSC_SHIP_TYPE	VARCHAR2(10 char)	
LMIU_SHIP_TYPE	VARCHAR2(10 char)	
WIDTH	NUMBER(4,1)	
DRAUGHT	NUMBER(4,1)	
DESTINATION	VARCHAR2(100 char)	
TRUE_HEADING	NUMBER(9)	
NAVIGATION_STATUS	NUMBER(2)	
EPFD_STATUS	NUMBER(1)	
EPFD_TYPE	NUMBER(2)	
AIS_CLASS	NUMBER(1)	
AIS_SHIP_TYPE	NUMBER(2)	
SPEED	NUMBER(5,1)	
COURSE	NUMBER(4,1)	
ROT	NUMBER(9)	
LATITUDE	NUMBER(8,6)	
LONGITUDE	NUMBER(9,6)	
SDO_POINT	MDSYS.SDO_GEOMETRY	
AIS_SHIP_CARGO	NUMBER(1)	
COUNTRY_NPOC	VARCHAR2(4000 char)	
COUNTRY_DESTINATION	VARCHAR2(4000 char)	
AREAS_NPOC	VARCHAR2(4000 char)	
AREAS_DESTINATION	VARCHAR2(4000 char)	
COG_AIS_SYMBIOLOGY	NUMBER	

VESSELS_ENRICHMENT		
FK_VESSEL_ID	NUMBER(28)	<pk>
VESSEL_ICON	NUMBER(2)	
VESSEL_IMO	NUMBER(10)	
VESSEL_MMSI	NUMBER(10)	
VESSEL_CALL_SIGN	VARCHAR2(7 char)	
VESSEL_SHIP_NAME	VARCHAR2(35 char)	
VESSEL_FLAG	VARCHAR2(3 char)	
VESSEL_IR_NUMBER	VARCHAR2(12 char)	
VESSEL_XR_NUMBER	VARCHAR2(14 char)	
IS_BB	CHAR(1 char)	
IS_FVP	CHAR(1 char)	
IS_BANNED	CHAR(1 char)	
IS_SHT	CHAR(1 char)	
IS_DETAINED	CHAR(1 char)	
PSC_SHIP_TYPE	VARCHAR2(10 char)	
LMIU_SHIP_TYPE	VARCHAR2(10 char)	
IS_IDLE	CHAR(1 char)	
IDLE_DT	DATE	
IS_HAZMAT	CHAR(1 char)	
IS_THERE_PORT_NOT	CHAR(1 char)	
IS_RELEVANT	CHAR(1 char)	
ALERT_TYPE	NUMBER(1)	
ALERT_DESCRIPTION	VARCHAR2(100 char)	
STIRES_VOYAGE_ID	VARCHAR2(36 char)	
EIS_VOYAGE_ID	VARCHAR2(36 char)	
ETA_TO_PORTOFCALL	TIMESTAMP	
ETD_FROM_PORTOFCALL	TIMESTAMP	
PORTOFCALL	VARCHAR2(5 char)	
POB_VOYAGE_TOWARDS_PORTOFCALL	VARCHAR2(5 char)	
SHIP_CALL_ID	VARCHAR2(36 char)	
LASTPORT	VARCHAR2(5 char)	
NEXTPORT	VARCHAR2(5 char)	
ATA_TO_PORTOFCALL	TIMESTAMP	
ATD_FROM_PORTOFCALL	TIMESTAMP	
ETA_TO_NEXTPORT	TIMESTAMP	
ETD_FROM_LASTPORT	TIMESTAMP	
POSITION_IN_PORTOFCALL	VARCHAR2(15 char)	
POSSIBLE_ANCHORAGE	VARCHAR2(1 char)	
PLANNED_OPERATIONS	VARCHAR2(256 char)	
PLANNED_WORKS	VARCHAR2(256 char)	
SHIP_CONFIGURATION	VARCHAR2(10 char)	
CARGO_VOLUME_NATURE	VARCHAR2(256 char)	
CONDITION_CARGO_BALLAST_TANKS	VARCHAR2(256 char)	
ANCHORAGE	VARCHAR2(1 char)	
HAZMATONBOARD	VARCHAR2(1 char)	
POB_VOYAGE_TOWARDS_NEXTPORT	VARCHAR2(5 char)	
SENT_AT	TIMESTAMP	
LENGTH	NUMBER(5,1)	
WIDTH	NUMBER(4,1)	
DRAUGHT	NUMBER(4,1)	
AIS_SHIP_TYPE	NUMBER(2)	
AIS_SHIP_CARGO	NUMBER(1)	
EPFD_TYPE	NUMBER(2)	
VESSEL_STATUS	NUMBER(1)	
CREATE_DT	TIMESTAMP	

Figure 2-11 Vessel Tracks and Enrichment tables

2.3.2 Tables

This section lists and describes the new/updated tables contained in the STIRES_SCHEMA data model.

For the detailed table contents please refer to the subsequent sections.

Table	Comment
AIS_NOTIFICATIONS	<p>Updated</p> <p>Removed the BIT columns used for authorization, which is now controlled by the PERMISSIONS assigned to user and the geographical restrictions applicable as indicated in the AREA_VISUALIZATION_MASK column.</p> <p>Data are persisted by the STIRES Core.</p> <p>Enrichment data for each track are taken from the VESSELS_ENRICHMENT table.</p> <p>A NEW TRIGGER "AIS_NOTIFICATIONS_POST_INS_TRG" will be created to merge (i.e. insert if none exists/update if one exists) the incoming track in the VESSEL_TRACKS that holds the latest AIS track for a given vessel.</p>
ARCGIS_AIS_TRACKS	<p>Deprecated</p> <p>Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSEL_TRACKS table.</p>
ARCGIS_AIS_TRACKS_ROUTE	<p>Deprecated</p> <p>The route of each vessel – based on the tracks of the last 24 hours – is taken from the AIS_NOTIFICATIONS and is stored in the application server memory.</p>
ARCGIS_FUSED_TRACKS	<p>Deprecated</p> <p>Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSEL_TRACKS table.</p>
ARCGIS_FUSED_TRACKS_ROUTE	<p>Deprecated</p> <p>The route of each vessel – based on the tracks of the last 24 hours – is taken from the AIS_NOTIFICATIONS & LRIT_NOTIFICATIONS and is stored in the application server memory.</p>
ARCGIS_LRIT_TRACKS	<p>Deprecated</p>

	Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSEL_TRACKS table.
ARCGIS_LRIT_TRACKS_ROUTE	Deprecated The route of each vessel – based on the tracks of the last 24 hours – is taken from the LRIT_NOTIFICATIONS and is stored in the application server memory.
ARCGIS_VMS_TRACKS	Deprecated Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSEL_TRACKS table.
ARCGIS_VMS_TRACKS_ROUTE	Deprecated The route of each vessel – based on the tracks of the last 24 hours – is taken from the VMS_NOTIFICATIONS and is stored in the application server memory.
EIS_VOYAGES	Deprecated Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSELS_ENRICHMENT table.
GIS_AIS_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest AIS track is merged in the VESSELS_TRACKS table upon insert in the AIS_NOTIFICATIONS using a post update trigger.
GIS_LRIT_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest LRIT track is merged in the VESSELS_TRACKS table upon insert in the LRIT_NOTIFICATIONS using a post update trigger.
GIS_VMS_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest VMS track is merged in the VESSELS_TRACKS table upon insert in the VMS_NOTIFICATIONS using a post update trigger.
ALRIT_NOTIFICATIONS	Updated A NEW TRIGGER "LRIT_NOTIFICATIONS_POST_INS_TRG" will

	be created to merge (i.e. insert if none exists/update if one exists) the incoming track in the VESSEL_TRACKS that holds the latest LRIT track for a given vessel.
SWAP_AIS_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest AIS track is merged in the VESSELS_TRACKS table upon insert in the ASI_NOTIFICATIONS using a post update trigger.
SWAP_LRIT_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest LRIT track is merged in the VESSELS_TRACKS table upon insert in the LRIT_NOTIFICATIONS using a post update trigger.
SWAP_VMS_DATA	Deprecated Will no longer be in use in the SSN GI v2.2. The latest VMS track is merged in the VESSELS_TRACKS table upon insert in the VMS_NOTIFICATIONS using a post update trigger.
VESSELS_ENRICHMENT	New It holds the vessel enrichment data retrieved upon request from EIS. Amongst data stored are the latest vessel details retrieved from RVD. Data will be used to enrich the NOTIFICATIONS specific table records.
VESSELS_NOTIFICATIONS	Deprecated Will no longer be in use in the SSN GI v2.2. It is replaced by the the VESSELS_ENRICHMENT table.
VESSEL_TRACKS	New Combines the latest tracks from AIS_NOTIFICATIONS, LRIT_NOTIFICATIONS and VMS_NOTIFICATIONS. Note: one track of each sensor type (e.g. AIS, LRIT and VMS). Tracks are loaded on the application server memory; the SDO geometry is calculated at

	that level; hence SDO geometry column is deprecated.
VMS_NOTIFICATIONS	Updated A NEW TRIGGER "VMS_NOTIFICATIONS_POST_INS_TRG" will be created to merge (i.e. insert if none exists/update if one exists) the incoming track in the VESSEL_TRACKS that holds the latest VMS track for a given vessel.

Table 2-8 STIRES_SCHEMA List of new/deprecated Tables

2.3.2.1 Table VESSEL_TRACKS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
OBJECTID	X		X	NUMBER	
CONTACT_DT			X	DATE	
SOURCE_TYPE			X	VARCHAR2(50 char)	50
SENT_MMSI_NUMBER				NUMBER(10)	10
SENT_IMO_NUMBER				NUMBER(10)	10
SENT_SHIP_NAME				VARCHAR2(35 char)	35
SENT_CALL_SIGN				VARCHAR2(7 char)	7
SENT_IR_NUMBER				VARCHAR2(12 char)	12
SENT_XR_NUMBER				VARCHAR2(14 char)	14
LENGTH				NUMBER(5,1)	5
SHIP_TYPE				NUMBER(2)	2
PSC_SHIP_TYPE				VARCHAR2(10 char)	10
LMIU_SHIP_TYPE				VARCHAR2(10 char)	10
WIDTH				NUMBER(4,1)	4
DRAUGHT				NUMBER(4,1)	4
DESTINATION				VARCHAR2(100 char)	100
TRUE_HEADING				NUMBER(9)	9
NAVIGATION_STATUS				NUMBER(2)	2
EPFD_STATUS				NUMBER(1)	1
EPFD_TYPE				NUMBER(2)	2

AIS_CLASS				NUMBER(1)	1
AIS_SHIP_TYPE				NUMBER(2)	2
SPEED				NUMBER(5,1)	5
COURSE				NUMBER(4,1)	4
ROT				NUMBER(9)	9
LATITUDE				NUMBER(8,6)	8
LONGITUDE				NUMBER(9,6)	9
SDO_POINT				MDSYS.SDO_GEOMETRY	
AIS_SHIP_CARGO				NUMBER(1)	1
COUNTRY_NPOC				VARCHAR2(4000 char)	4000
COUNTRY_DESTINATION				VARCHAR2(4000 char)	4000
AREAS_NPOC				VARCHAR2(4000 char)	4000
AREAS_DESTINATION				VARCHAR2(4000 char)	4000
COG_AIS_SYMBLOGY				NUMBER	

2.3.2.2 Table **VESSELS_ENRICHMENT**

Code	Primary	Foreign Key	Mandatory	Data Type	Length
FK_VESSEL_ID	X		X	NUMBER(28)	28
VESSEL_ICON				NUMBER(2)	2
VESSEL_IMO				NUMBER(10)	10
VESSEL_MMSI				NUMBER(10)	10
VESSEL_CALL_SIGN				VARCHAR2(7 char)	7
VESSEL_SHIP_NAME				VARCHAR2(35 char)	35
VESSEL_FLAG				VARCHAR2(3 char)	3
VESSEL_IR_NUMBER				VARCHAR2(12 char)	12
VESSEL_XR_NUMBER				VARCHAR2(14 char)	14
IS_BB				CHAR(1 char)	1

IS_FVP				CHAR(1 char)	1
IS_BANNED				CHAR(1 char)	1
IS_SHT				CHAR(1 char)	1
IS_DETAINED				CHAR(1 char)	1
PSC_SHIP_TYPE				VARCHAR2(10 char)	10
LMIU_SHIP_TYPE				VARCHAR2(10 char)	10
IS_IDLE				CHAR(1 char)	1
IDLE_DT				DATE	
IS_HAZMAT				CHAR(1 char)	1
IS_THERE_PORT_NOT				CHAR(1 char)	1
IS_RELEVANT				CHAR(1 char)	1
ALERT_TYPE				NUMBER(1)	1
ALERT_DESCRIPTION				VARCHAR2(100 char)	100
STIRES_VOYAGE_ID				VARCHAR2(36 char)	36
EIS_VOYAGE_ID				VARCHAR2(36 char)	36
ETA_TO_PORTOFCALL				TIMESTAMP	
ETD_FROM_PORTOFCALL				TIMESTAMP	
PORTOFCALL				VARCHAR2(5 char)	5
POB_VOYAGE_TOWARDS_PORTOFCALL				VARCHAR2(5 char)	5
SHIP_CALL_ID				VARCHAR2(36 char)	36
LASTPORT				VARCHAR2(5 char)	5
NEXTPORT				VARCHAR2(5 char)	5
ATA_TO_PORTOFCALL				TIMESTAMP	
ATD_FROM_PORTOFCALL				TIMESTAMP	

ETA_TO_NEXTPORT				TIMESTAMP	
ETD_FROM_LASTPORT				TIMESTAMP	
POSITION_IN_PORTOFCALL				VARCHAR2(15 char)	15
POSSIBLE_ANCHORAGE				VARCHAR2(1 char)	1
PLANNED_OPERATIONS				VARCHAR2(256 char)	256
PLANNED_WORKS				VARCHAR2(256 char)	256
SHIP_CONFIGURATION				VARCHAR2(10 char)	10
CARGO_VOLUME_NATURE				VARCHAR2(256 char)	256
CONDITION_CARGO_BALLAST_TANKS				VARCHAR2(256 char)	256
ANCHORAGE				VARCHAR2(1 char)	1
HAZMATONBOARD				VARCHAR2(1 char)	1
POB_VOYAGE_TOWARDS_NEXTPORT				VARCHAR2(5 char)	5
SENT_AT				TIMESTAMP	
LENGTH				NUMBER(5,1)	5
WIDTH				NUMBER(4,1)	4
DRAUGHT				NUMBER(4,1)	4
AIS_SHIP_TYPE				NUMBER(2)	2
AIS_SHIP_CARGO				NUMBER(1)	1
EPFD_TYPE				NUMBER(2)	2
VESSEL_STATUS				NUMBER(1)	1
CREATE_DT				TIMESTAMP	

2.3.3 Views

The list of new/updated views is presented hereunder.



Figure 2-12 STIRES_SCHEMA Views

View	Comment
NOTIFICATIONS_VIEW	Provides a combined view of the AIS, LRIT and

	VMS notifications. Used by the vessel history and playback functionalities.
VESSEL_TRACKS_VW	Combines the latest VESSEL_TRACKS and corresponding (based on the FK_VESSEL_ID) vessel's VESSELS_ENRICHMENT data. Used by the map tab.
VESSELS_VIEW	Provides a deformatized view of the VESSELS_OPERATIONAL_REGISTRY and VESSELS_DETAILS along with the reference (TREF) AIS, LMIU and PSC ship types. Used by the new vessels tab.

Table 2-9: SSN-EIS List of Views

2.3.4 Synonyms

External data sources are referenced via the SYNONYMS defined hereunder for the newly defined tables listed in the previous sub section.

Synonym	Comments
NOTIFICATIONS_VIEW	<i>Synonym Type:</i> Private synonym <i>Synonym Owner:</i> ARCGIS_STIRES <i>Object Name:</i> NOTIFICATIONS_VIEW <i>Object Owner:</i> STIRES_SCHEMA <i>Object Type:</i> View
VESSEL_TRACKS_VW	<i>Synonym Type:</i> Private synonym <i>Synonym Owner:</i> ARCGIS_STIRES <i>Object Name:</i> VESSEL_TRACKS_VW <i>Object Owner:</i> STIRES_SCHEMA <i>Object Type:</i> View
VESSELS_VIEW	<i>Synonym Type:</i> Private synonym <i>Synonym Owner:</i> ARCGIS_STIRES <i>Object Name:</i> VESSELS_VIEW <i>Object Owner:</i> STIRES_SCHEMA <i>Object Type:</i> View

Table 2-10: STIRES_SCHEMA List of Synonyms

2.3.5 Packages and Procedures, Functions

The list of updated/deprecated packages and procedures is presented hereunder.

Package	Description
PCK_AIS_DATA_MANAGE	Deprecated

Package	Description
	Will no longer be in use in the SSN GI v2.2. STIRES Core persist the AIS_NOTIFICATIONS data per message type. Enrichment information are taken from the VESSELS_ENRICHMENT TABLE.
P_REFRESH_ARCGIS_AIS	Deprecated Will no longer be in use in the SSN GI v2.2. The latest AIS track is merged in the VESSELS_TRACKS table upon insert in the AIS_NOTIFICATIONS using a post update trigger.
P_REFRESH_ARCGIS_LRIT	Deprecated Will no longer be in use in the SSN GI v2.2. The latest LRIT track is merged in the VESSELS_TRACKS table upon insert in the LRIT_NOTIFICATIONS using a post update trigger.
P_REFRESH_ARCGIS_VMS	Deprecated Will no longer be in use in the SSN GI v2.2. The latest VMS track is merged in the VESSELS_TRACKS table upon insert in the VMS_NOTIFICATIONS using a post update trigger.
PCK_VESSEL_ENRICHMENT	New Enrich the resolved vessel reported on a VDM message. The package will entail procedures that take as input the SSN-EIS enrichment information to update the STIRES OVR and the VESSELS_ENRICHMENT table data.
PCK_VMS_UTILITY	Updated Update the ENRICH_VMS_VESSEL_SF function to take data from the newly defined VESSELS_ENRICHMENT table that holds the enrichment data pore vessel taken from SSN-EIS. Functions F_UPDATE_VMS_TRACKS and F_INSERT_VMS_DATA become deprecated as the GIS_VMS_DATA and ARCGIS_VMS_DATA tables become deprecated.

Table 2-11: STIRES_SCHEMA List of Packages and Procedures

2.4 Physical Data Model (REF_ADMIN)

The updated physical design diagram of the REF_ADMIN database schema objects is depicted in the following subsection.

2.4.1 Central Ship Database (CSD)

2.4.1.1 Physical design diagrams

The physical data model is depicted in the Figure 2-13 and Figure 2-14. The diagrams present the tables that hold the reference vessel database details and data relative to MARS vessels as well as data export of ship particulars stored in national vessel databases in electronic format.

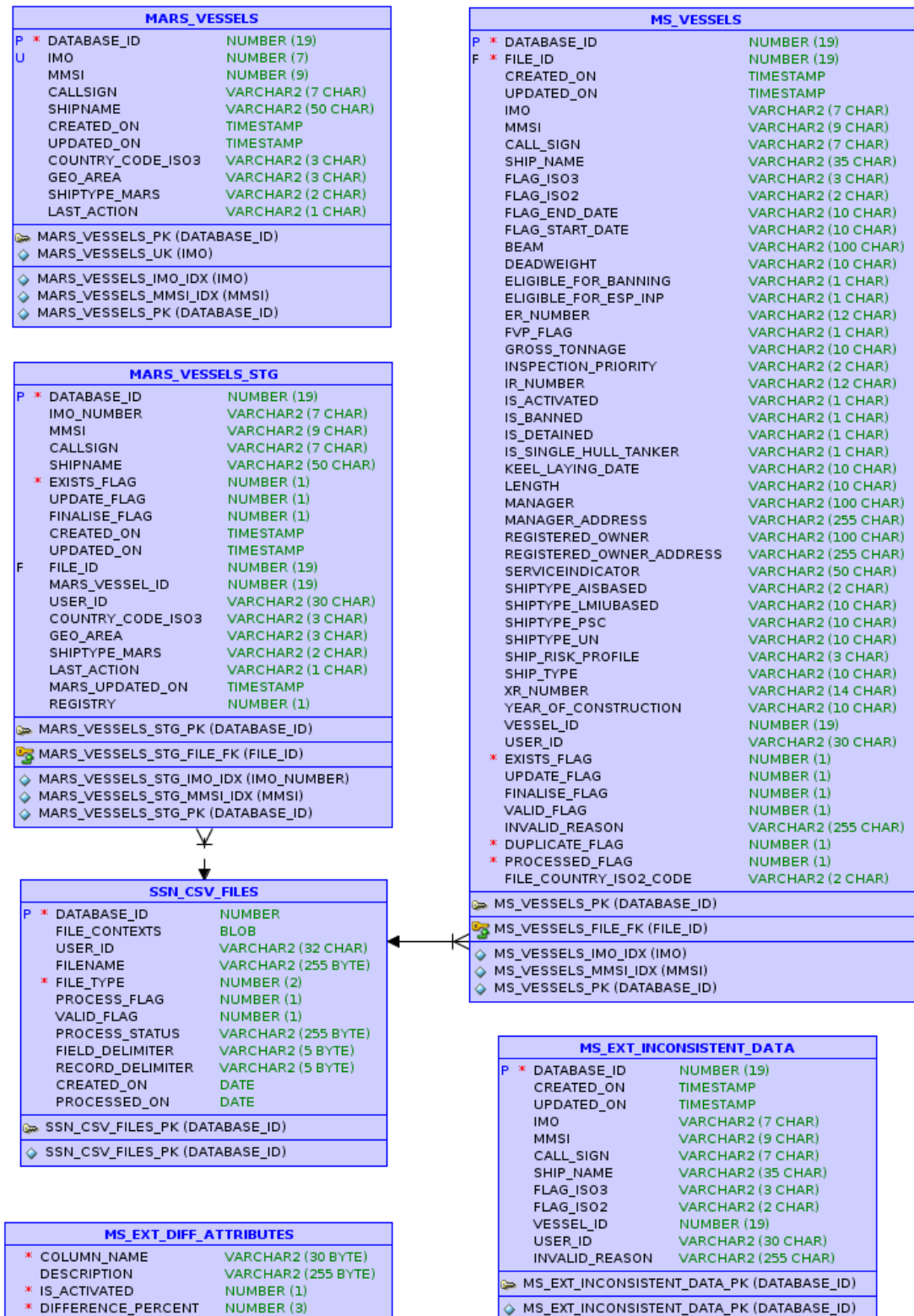


Figure 2-13 CSD - Physical Design Diagram 1

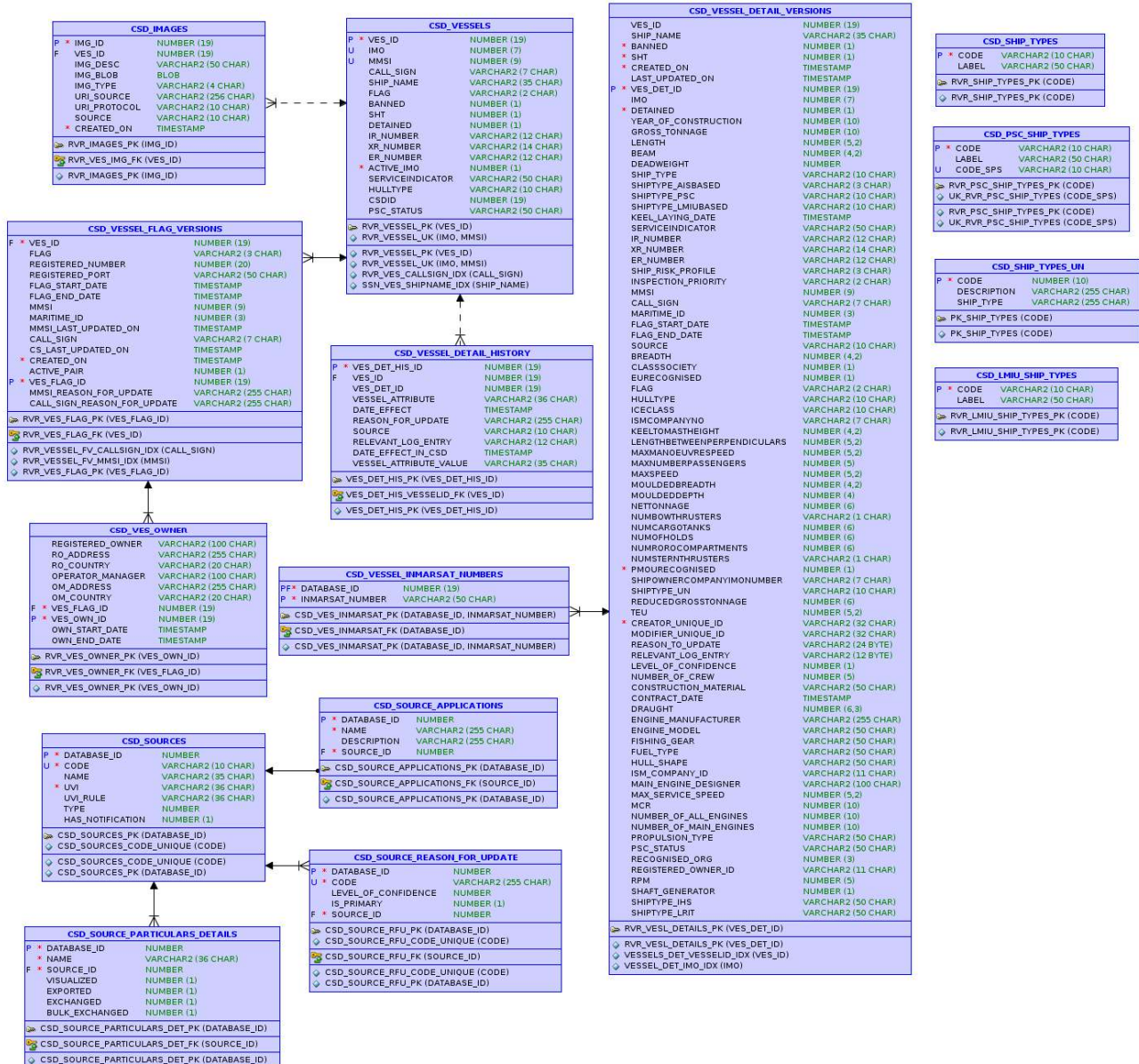


Figure 2-14 CSD - Physical Design Diagram 2

2.4.1.2 Tables

The following table provides the definition of the new and modified tables.

Table	Comment
CSD_AIS_SHIP_TYPES	This table contains all AIS ship types
CSD_IMAGES	A storage for multimedia files related to a RVR_VESSEL. The files include pictures or video and are stored as BLOBs.
CSD_LMIU_SHIP_TYPES	The type of ship according to Lloyd's List classification
CSD_PSC_SHIP_TYPES	The type of ship according to the PSC classification
CSD_SHIP_TYPES	Ship types
CSD_SHIP_TYPES_UN	The type of ship according to the PSC UN/ECE classification. Possible values as per Annex C
CSD_SOURCE_APPLICATIONS	List of applications per external source as ship particulars data provider
CSD_SOURCE_PARTICULARS_DETAILS	List of ship particulars attributes provided per external source
CSD_SOURCE_REASON_FOR_UPDATE	List of secondary reasons for update per external source
CSD_SOURCES	List of external sources and their configuration
CSD_VES_OWNER	Defined the vessel owner and operator/manager along with their address and country of origin.
CSD_VESSEL_DETAIL_HISTORY	Holds the update details of vessel particulars such as the reason and timestamp the updates became effective
CSD_VESSEL_DETAIL_VERSIONS	
CSD_VESSEL_FLAG_VERSIONS	The active flag signifies that the MMSI is part of the active IMO+MMSI pair. The MMSI and CallSign are active provided the vessel flag is currently active based on the flag start and end date. The MMSI and CallSign are correlated and are bound to change when the vessel flag changes. The MMSI and CallSign could be updated at a different stage thus the dates of the last update will be stored per attribute.

	The createdon timestamp refers to the actual record.
CSD_VESSEL_INMARSAT_NUMBERS	Holds per vessel detail the numbers indicating the location of the ship by satellite services of Inmarsat
CSD_VESSELS	<p>Stores the vessels that are primarily identified by the IMO number.</p> <p>The IMO number is Active and is part of an Active IMO+MMSI pair OR is Active but not part of an active IMO+MMSI pair OR is Non-Active.</p> <p>At a given point in time the pair of IMO+MMSI numbers is considered as the active pair given that the IMO is active and the MMSI corresponds to the VRV_VESSEL_FLAG_VERSIONS active MMSI entry.</p> <p>NOTE: Although the MMSI, ShipName and CallSign can be extracted from the referenced tables, they are also stored here (duplicated) to facilitate the queries during the EIS and STIRES OVR updates.</p>
CSD_VESSELS_EXP	Temporary table storing vessels from AppendixI_ListVesselsCallingAtEUports.xls Data will be exported and provided to the client.
MARINFO	
MARINFO_LOTA_MAX	
MARINFO_LOTA_MIN	
MARINFO_LOTB_MAX	
MARINFO_LOTB_MIN	
MARS_VESSELS	Vessels registered in MARS database. Data from external table stage MARS_VESSELS_STG
MARS_VESSELS_STG	Stage table for vessels registered in MARS database. Data imported from external table MARS_VESSELS_EXT
MS_EXT_DIFF_ATTRIBUTES	Table to configure acceptable "range" of difference attributes (IMO, MMSI, CallSign, ShipName etc.)
MS_EXT_INCONSISTENT_DATA	<p>Table contains MS external file inconsistent data.</p> <p>Vessel found more than one times</p> <p>Case 1: Same MMSI or IMO or SHPINAME or CALL SIGN for the same flag code</p> <p>Case 1: Same MMSI or IMO or SHPINAME or CALL</p>

	SIGN for different flag codes
MS_VESSELS	The uploaded MS vessels stage table
SSN_CSV_FILES	The uploaded CSV files

Table 2-12 List of CSD Tables

2.4.1.2.1 Table CSD_AIS_SHIP_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
PK_AIS_SHIP_TYPES_ID	X		X	NUMBER	
TRANSMISSION_CODE_AIS				NUMBER	
TRANSMISSION_CODE_CARGO				NUMBER	
TRANSMISSION_CODE_SPS				VARCHAR2(2 char)	2
DESCRIPTION				VARCHAR2(100 char)	100
CREATE_DT			X	DATE	
CREATE_USER_ID			X	NUMBER	
UPDATE_DT			X	DATE	
UPDATE_USER_ID			X	NUMBER	

2.4.1.2.2 Table CSD_IMAGES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMG_ID	X		X	NUMBER(19)	19
VES_ID		X		NUMBER(19)	19
IMG_DESC				VARCHAR2(50 char)	50
IMG_BLOB				BLOB	
IMG_TYPE				VARCHAR2(4 char)	4
URI_SOURCE				VARCHAR2(256 char)	256
URI_PROTOCOL				VARCHAR2(10 char)	10
SOURCE				VARCHAR2(10 char)	10
CREATED_ON			X	TIMESTAMP	

2.4.1.2.3 Table CSD_LMIU_SHIP_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(10 char)	10
LABEL				VARCHAR2(50 char)	50

2.4.1.2.4 Table CSD_PSC_SHIP_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(10 char)	10
LABEL				VARCHAR2(50 char)	50
CODE_SPS				VARCHAR2(10 char)	10

2.4.1.2.5 Table CSD_SHIP_TYPES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	VARCHAR2(10 char)	10
LABEL				VARCHAR2(50 char)	50

2.4.1.2.6 Table CSD_SHIP_TYPES_UN

Code	Primary	Foreign Key	Mandatory	Data Type	Length
CODE	X		X	NUMBER(10)	10
DESCRIPTION				VARCHAR2(255 char)	255
SHIP_TYPE				VARCHAR2(255 char)	255

2.4.1.2.7 Table CSD_SOURCE_APPLICATIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER	
NAME			X	VARCHAR2(255)	255
DESCRIPTION				VARCHAR2(255)	255
SOURCE_ID		X	X	NUMBER	

2.4.1.2.8 Table CSD_SOURCE_PARTICULARS_DETAILS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER	
NAME			X	VARCHAR2(36)	36
SOURCE_ID		X	X	NUMBER	
VISUALIZED				NUMBER(1)	1
EXPORTED				NUMBER(1)	1
EXCHANGED				NUMBER(1)	1
BULK_EXCHANGED				NUMBER(1)	1

2.4.1.2.9 Table CSD_SOURCE_REASON_FOR_UPDATE

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER	
CODE			X	VARCHAR2(255)	255
LEVEL_OF_CONFIDENCE				NUMBER	
IS_PRIMARY				NUMBER(1)	1
SOURCE_ID		X	X	NUMBER	

2.4.1.2.10 Table CSD_SOURCES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
CODE			X	VARCHAR2(35)	35
NAME				VARCHAR2(35)	35
UVI			X	VARCHAR2(36)	36
UVI_RULE				VARCHAR2(36)	36
TYPE				NUMBER	
HAS_NOTIFICATION				NUMBER(1)	1

2.4.1.2.11 Table CSD_VES_OWNER

Code	Primary	Foreign Key	Mandatory	Data Type	Length
REGISTERED_OWNER				VARCHAR2(100 char)	100
RO_ADDRESS				VARCHAR2(255 char)	255
RO_COUNTRY				VARCHAR2(20 char)	20
OPERATOR_MANAGER				VARCHAR2(100 char)	100
OM_ADDRESS				VARCHAR2(255 char)	255
OM_COUNTRY				VARCHAR2(20 char)	20
VES_FLAG_ID		X	X	NUMBER(19)	19
VES_OWN_ID	X		X	NUMBER(19)	19
OWN_START_DATE				TIMESTAMP	
OWN_END_DATE				TIMESTAMP	

2.4.1.2.12 Table CSD_VESSEL_DETAIL_HISTORY

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VES_DET_HIS_ID	X		X	NUMBER(19)	19
VES_ID		X		NUMBER(19)	19
VES_DET_ID				NUMBER(19)	19
VESSEL_ATTRIBUTE				VARCHAR2(36 char)	36
DATE_EFFECT				TIMESTAMP	
REASON_FOR_UPDATE				VARCHAR2(255 char)	255
SOURCE				VARCHAR2(10 char)	10
RELEVANT_LOG_ENTRY				VARCHAR2(12 char)	12
VESSEL_ATTRIBUTE_VALUE				VARCHAR2(35)	35
DATE_EFFECT_IN_CSD				TIMESTAMP	

2.4.1.2.13 Table CSD_VESSEL_DETAIL_VERSIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VES_ID		X		NUMBER(19)	19

SHIP_NAME				VARCHAR2(35 char)	35
BANNED			X	NUMBER(1)	1
SHT			X	NUMBER(1)	1
CREATED_ON			X	TIMESTAMP	
LAST_UPDATED_ON				TIMESTAMP	
VES_DET_ID	X		X	NUMBER(19)	19
IMO				NUMBER(7)	7
DETAINED			X	NUMBER(1)	1
YEAR_OF_CONSTRUCTION				NUMBER(10)	10
GROSS_TONNAGE				NUMBER(10)	10
LENGTH				NUMBER(5,2)	5
BEAM				NUMBER(4,2)	4
DEADWEIGHT				NUMBER	
SHIP_TYPE				VARCHAR2(10 char)	10
SHIPTYPE_AISBASED				VARCHAR2(3 char)	3
SHIPTYPE_PSC				VARCHAR2(10 char)	10
SHIPTYPE_LMIUBASED				VARCHAR2(10 char)	10
KEEL_LAYING_DATE				TIMESTAMP	
SERVICEINDICATOR				VARCHAR2(50 char)	50
IR_NUMBER				VARCHAR2(12 char)	12
XR_NUMBER				VARCHAR2(14 char)	14
ER_NUMBER				VARCHAR2(12 char)	12
SHIP_RISK_PROFILE				VARCHAR2(3 char)	3
INSPECTION_PRIORITY				VARCHAR2(2 char)	2

MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
MARITIME_ID				NUMBER(3)	3
FLAG_START_DATE				TIMESTAMP	
FLAG_END_DATE				TIMESTAMP	
SOURCE				VARCHAR2(10 char)	10
BREADTH				NUMBER(4,2)	4
CLASSSOCIETY				NUMBER(1)	1
EURECOGNISED				NUMBER(1)	1
FLAG				VARCHAR2(2 char)	2
HULLTYPE				VARCHAR2(10 char)	10
ICECLASS				VARCHAR2(10 char)	10
ISMCOMPANYNO				VARCHAR2(7 char)	7
KEELTOMASTHEIGHT				NUMBER(4,2)	4
LENGTHBETWEENPERPENDICULAR S				NUMBER(5,2)	5
MAXMANOEUVRESPEED				NUMBER(5,2)	5
MAXNUMBERPASSENGERS				NUMBER(5)	5
MAXSPEED				NUMBER(5,2)	5
MOULDEDBREADTH				NUMBER(4,2)	4
MOULDEDDEPTH				NUMBER(4)	4
NETTONNAGE				NUMBER(6)	6
NUMBOWTHRUSTERS				VARCHAR2(1 char)	1
NUMCARGOTANKS				NUMBER(6)	6
NUMOFHOLDS				NUMBER(6)	6
NUMROROCOMPARTMENTS				NUMBER(6)	6
NUMSTERNTHRUSTERS				VARCHAR2(1	1

				char)	
PMOURECOGNISED			X	NUMBER(1)	1
SHIPOWNERCOMPANYIMONUMBER				VARCHAR2(7 char)	7
SHIPTYPE_UN				VARCHAR2(10 char)	10
REDUCEDGROSSTONNAGE				NUMBER(6)	6
TEU				NUMBER(5,2)	5
CREATOR_UNIQUE_ID				VARCHAR2(32 char)	32
MODIFIER_UNIQUE_ID				VARCHAR2(32 char)	32
REASON_TO_UPDATE				VARCHAR2(24)	24
RELEVANT_LOG_ENTRY				VARCHAR2(12)	12
LEVEL_OF_CONFIDENCE				NUMBER(1)	1
SHIPTYPE_LRIT				VARCHAR2(50)	50
SHIPTYPE_IHS				VARCHAR2(50)	50
CONTRACT_DATE				TIMESTAMP	
PSC_STATUS				VARCHAR2(50)	50
DRAUGHT				NUMBER(6,3)	6
HULL_SHAPE				VARCHAR2(50)	50
MAX_SERVICE_SPEED				NUMBER(5,2)	5
PROPULSION_TYPE				VARCHAR2(50 char)	50
MCR				NUMBER(10)	10
RPM				NUMBER(5)	5
FUEL_TYPE				VARCHAR2(50 char)	50
CONSTRUCTION_MATERIAL				VARCHAR2(50 char)	50
FISHING_GEAR				VARCHAR2(50 char)	50
NUMBER_OF_ALL_ENGINES				NUMBER(10)	10
NUMBER_OF_MAIN_ENGINES				NUMBER(10)	10

MAIN_ENGINE_DESIGNER				VARCHAR2(100 char)	100
SHAFT_GENERATOR				NUMBER(1)	1
ENGINE_MANUFACTURER				VARCHAR2(255 char)	255
ENGINE_MODEL				VARCHAR2(50 char)	50
RECOGNISED_ORG				NUMBER(3)	3
REGISTERED_OWNER_ID				VARCHAR2(11 char)	11
ISM_COMPANY_ID				VARCHAR2(11 char)	11
NUMBER_OF_CREW				NUMBER(5)	5

2.4.1.2.14 Table CSD_VESSEL_FLAG_VERSIONS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VES_ID		X	X	NUMBER(19)	19
FLAG				VARCHAR2(3 char)	3
REGISTERED_NUMBER				NUMBER(20)	20
REGISTERED_PORT				VARCHAR2(50 char)	50
FLAG_START_DATE				TIMESTAMP	
FLAG_END_DATE				TIMESTAMP	
MMSI				NUMBER(9)	9
MARITIME_ID				NUMBER(3)	3
MMSI_LAST_UPDATED_ON				TIMESTAMP	
CALL_SIGN				VARCHAR2(7 char)	7
CS_LAST_UPDATED_ON				TIMESTAMP	
CREATED_ON			X	TIMESTAMP	
ACTIVE_PAIR				NUMBER(1)	1

VES_FLAG_ID	X		X	NUMBER(19)	19
MMSI_REASON_FOR_UPDATE				VARCHAR2(25 5 char)	255
CALL_SIGN_REASON_FOR_UPDATE				VARCHAR2(25 5 char)	255

2.4.1.2.15 Table CSD_VESSEL_INMARSAT_NUMBERS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X	X	X	NUMBER(19)	19
INMARSAT_NUMBER	X		X	VARCHAR2(50 char)	50

2.4.1.2.16 Table CSD_VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VES_ID	X		X	NUMBER(19)	19
IMO			X	NUMBER(7)	7
MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
FLAG				VARCHAR2(2 char)	2
BANNED				NUMBER(1)	1
SHT				NUMBER(1)	1
DETAINED				NUMBER(1)	1
IR_NUMBER				VARCHAR2(12 char)	12
XR_NUMBER				VARCHAR2(14 char)	14
ER_NUMBER				VARCHAR2(12 char)	12
ACTIVE_IMO			X	NUMBER(1)	1
SERVICEINDICATOR				VARCHAR2(50 char)	50
HULLTYPE				VARCHAR2(10 char)	10
CSDID				NUMBER(19)	19
PSC_STATUS				VARCHAR2(50 char)	50

2.4.1.2.17 Table CSD_VESSELS_EXP

Code	Primary	Foreign Key	Mandatory	Data Type	Length
VES_ID	X		X	NUMBER(19)	19
IMO			X	NUMBER(7)	7
MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
FLAG				VARCHAR2(3 char)	3
BANNED				NUMBER(1)	1
SHT				NUMBER(1)	1
DETAINED				NUMBER(1)	1
IR_NUMBER				VARCHAR2(12 char)	12
XR_NUMBER				VARCHAR2(14 char)	14
ER_NUMBER				VARCHAR2(12 char)	12
ACTIVE_IMO			X	NUMBER(1)	1

2.4.1.2.18 Table MARINFO

Code	Primary	Foreign Key	Mandatory	Data Type	Length
SHIP_NAME				VARCHAR2(35 char)	35
CREATED_ON			X	TIMESTAMP	
LAST_UPDATED_ON				TIMESTAMP	
IMO				NUMBER(7)	7
YEAR_OF_CONSTRUCTION				NUMBER(10)	10
GROSS_TONNAGE				NUMBER(10)	10
LENGTH				NUMBER(5)	5
BEAM				NUMBER(4)	4
DEADWEIGHT				NUMBER	
KEEL_LAYING_DATE				TIMESTAMP	
SERVICEINDICATOR				VARCHAR2(50 char)	50

MMSI				NUMBER(9)	9
CALL_SIGN				VARCHAR2(7 char)	7
SOURCE				VARCHAR2(10 char)	10
BREADTH				NUMBER(4,2)	4
ISMCOMPANYNO				VARCHAR2(7 char)	7
LENGTHBETWEENPERPENDICULAR S				NUMBER(5,2)	5
MAXNUMBERPASSENGERS				NUMBER(5)	5
MAXSPEED				NUMBER(5,2)	5
MOULDEDDEPTH				NUMBER(4)	4
NUMCARGOTANKS				NUMBER(6)	6
NUMROROCOMPARTMENTS				NUMBER(6)	6
SHIPOWNERCOMPANYIMONUMBER				VARCHAR2(7 char)	7
TEU				NUMBER(5,2)	5
CREATOR_UNIQUE_ID				VARCHAR2(32 char)	32
MODIFIER_UNIQUE_ID				VARCHAR2(32 char)	32
SHIPTYPE_IHS				VARCHAR2(50 char)	50
CONTRACT_DATE				TIMESTAMP	
DRAUGHT				NUMBER(6,3)	6
HULL_SHAPE				VARCHAR2(50 char)	50
MAX_SERVICE_SPEED				NUMBER(5,2)	5
PROPULSION_TYPE				VARCHAR2(50 char)	50
MCR				NUMBER(10)	10
RPM				NUMBER(5)	5
FUEL_TYPE				VARCHAR2(50 char)	50

FISHING_GEAR				VARCHAR2(50 char)	50
NUMBER_OF_ALL_ENGINES				NUMBER(10)	10
NUMBER_OF_MAIN_ENGINES				NUMBER(10)	10
MAIN_ENGINE_DESIGNER				VARCHAR2(100 char)	10
ENGINE_MANUFACTURER				VARCHAR2(255 char)	25
ENGINE_MODEL				VARCHAR2(50 char)	50
ISM_COMPANY_ID				VARCHAR2(11 char)	11
NUMBER_OF_CREW				NUMBER(5)	5
FLAG				VARCHAR2(2 char)	2
BANNED			X	NUMBER(1)	1
CLASSSOCIETY			X	NUMBER(1)	1
CONSTRUCTION_MATERIAL				VARCHAR2(50 char)	50
DETAINED			X	NUMBER(1)	1
ER_NUMBER				VARCHAR2(12 char)	12
EURECOGNISED			X	NUMBER(1)	1
HULLTYPE				VARCHAR2(10 char)	10
ICECLASS				VARCHAR2(10 char)	10
IR_NUMBER				VARCHAR2(12 char)	12
KEELTOMASTHEIGHT				NUMBER(4,2)	4
MAXMANOEUVRESPEED				NUMBER(5,2)	5
NETTONNAGE				NUMBER(6)	6
NUMBOWTHRUSTERS				VARCHAR2(1 char)	1
NUMOFHOLDS				NUMBER(6)	6

NUMSTERNTHRUSTERS				VARCHAR2(1 char)	1
PMOURECOGNISED			X	NUMBER(1)	1
PSC_STATUS				VARCHAR2(50 char)	50
RECOGNISED_ORG				NUMBER(3)	3
REDUCEDGROSSTONNAGE				NUMBER(6)	6
REGISTERED_OWNER_ID				VARCHAR2(11 char)	11
SHAFT_GENERATOR				NUMBER(1)	1
SHIPTYPE_AISBASED				VARCHAR2(3 char)	3
SHIPTYPE_LMIUBASED				VARCHAR2(10 char)	10
SHIPTYPE_LRIT				VARCHAR2(50 char)	50
SHIPTYPE_PSC				VARCHAR2(10 char)	10
SHIPTYPE_UN				VARCHAR2(10 char)	10
XR_NUMBER				VARCHAR2(14 char)	14

2.4.1.2.19 Table MARINFO_LOTA_MAX

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMO				NUMBER	
MMSI				NUMBER	
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(50 char)	50
SHIPSTATUS				VARCHAR2(20 char)	20
UPDATED_ON				VARCHAR2(50 char)	50

2.4.1.2.20 Table MARINFO_LOTA_MIN

Code	Primary	Foreign	Mandatory	Data Type	Length
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		Key			
IMO				NUMBER	
MMSI				NUMBER	
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(35 char)	35
SHIPSTATUS				VARCHAR2(20 char)	20
UPDATED_ON				DATE	

2.4.1.2.21 Table MARINFO_LOTB_MAX

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMO				NUMBER	
MMSI				NUMBER	
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(50 char)	50
SHIPSTATUS				VARCHAR2(20 char)	20
FLAG				VARCHAR2(3 char)	3
START_DATE				VARCHAR2(19 char)	19
END_DATE				VARCHAR2(19 char)	19
UPDATED_ON				VARCHAR2(19 char)	19

2.4.1.2.22 Table MARINFO_LOTB_MAX

Code	Primary	Foreign Key	Mandatory	Data Type	Length
IMO				NUMBER	
MMSI				NUMBER	
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(35 char)	35
SHIPSTATUS				VARCHAR2(20 char)	20
FLAG				VARCHAR2(3 char)	3
START_DATE				VARCHAR2(19 char)	19
END_DATE				VARCHAR2(19 char)	19

UPDATED_ON				VARCHAR2(19 char)	19
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2.4.1.2.23 Table MARS_VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID			X	NUMBER(19)	19
IMO				VARCHAR2(7 char)	7
MMSI				VARCHAR2(9 char)	9
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(50 char)	35
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
COUNTRY_CODE_ISO3				VARCHAR2(3 char)	3
GEO_AREA				VARCHAR2(3 char)	3
SHIPTYPE_MARS				VARCHAR2(2 char)	2
LAST_ACTION				VARCHAR2(1 char)	1

2.4.1.2.24 Table MARS_VESSELS_STG

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
IMO_NUMBER				VARCHAR2(7 char)	7
MMSI				VARCHAR2(9 char)	9
CALLSIGN				VARCHAR2(7 char)	7
SHIPNAME				VARCHAR2(50 char)	50
EXISTS_FLAG			X	NUMBER(1)	1
UPDATE_FLAG				NUMBER(1)	1
FINALISE_FLAG				NUMBER(1)	1
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
FILE_ID		X		NUMBER(19)	19

MARS_VESSEL_ID				NUMBER(19)	19
USER_ID				VARCHAR2(30 char)	30
COUNTRY_CODE_ISO3				VARCHAR2(3 char)	3
GEO_AREA				VARCHAR2(3 char)	3
SHIPTYPE_MARS				VARCHAR2(2 char)	2
LAST_ACTION				VARCHAR2(1 char)	1
MARS_UPDATED_ON				TIMESTAMP	
REGISTRY				NUMBER(1)	1

2.4.1.2.25 Table MS_EXT_DIFF_ATTRIBUTES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
COLUMN_NAME			X	VARCHAR2(30)	30
DESCRIPTION				VARCHAR2(255)	255
IS_ACTIVATED			X	NUMBER(1)	1
DIFFERENCE_PERCENT			X	NUMBER(3)	3

2.4.1.2.26 Table MS_EXT_INCONSISTENT_DATA

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
IMO				VARCHAR2(7 char)	7
MMSI				VARCHAR2(9 char)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
FLAG_ISO3				VARCHAR2(3 char)	3
FLAG_ISO2				VARCHAR2(2 char)	2
VESSEL_ID				NUMBER(19)	19
USER_ID				VARCHAR2(30 char)	30

INVALID_REASON				VARCHAR2(255 char)	255
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2.4.1.2.27 Table MS_VESSELS

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER(19)	19
FILE_ID		X	X	NUMBER(19)	19
CREATED_ON				TIMESTAMP	
UPDATED_ON				TIMESTAMP	
IMO				VARCHAR2(7 char)	7
MMSI				VARCHAR2(9 char)	9
CALL_SIGN				VARCHAR2(7 char)	7
SHIP_NAME				VARCHAR2(35 char)	35
FLAG_ISO3				VARCHAR2(3 char)	3
FLAG_ISO2				VARCHAR2(2 char)	2
FLAG_END_DATE				VARCHAR2(10 char)	10
FLAG_START_DATE				VARCHAR2(10 char)	10
BEAM				VARCHAR2(100 char)	100
DEADWEIGHT				VARCHAR2(10 char)	10
ELIGIBLE_FOR_BANNING				VARCHAR2(1 char)	1
ELIGIBLE_FOR_ESP_INP				VARCHAR2(1 char)	1
ER_NUMBER				VARCHAR2(12 char)	12

FVP_FLAG				VARCHAR2(1 char)	1
GROSS_TONNAGE				VARCHAR2(10 char)	10
INSPECTION_PRIORITY				VARCHAR2(2 char)	2
IR_NUMBER				VARCHAR2(12 char)	12
IS_ACTIVATED				VARCHAR2(1 char)	1
IS_BANNED				VARCHAR2(1 char)	1
IS_DETAINED				VARCHAR2(1 char)	1
IS_SINGLE_HULL_TANKER				VARCHAR2(1 char)	1
KEEL_LAYING_DATE				VARCHAR2(10 char)	10
LENGTH				VARCHAR2(10 char)	10
MANAGER				VARCHAR2(100 char)	100
MANAGER_ADDRESS				VARCHAR2(255 char)	255
REGISTERED_OWNER				VARCHAR2(100 char)	100
REGISTERED_OWNER_ADDRESS				VARCHAR2(255 char)	255
SERVICEINDICATOR				VARCHAR2(50 char)	50
SHIPTYPE_AISBASED				VARCHAR2(2 char)	2
SHIPTYPE_LMIUBASED				VARCHAR2(10 char)	10
SHIPTYPE_PSC				VARCHAR2(10 char)	10
SHIPTYPE_UN				VARCHAR2(10 char)	10

				char)	
SHIP_RISK_PROFILE				VARCHAR2(3 char)	3
SHIP_TYPE				VARCHAR2(10 char)	10
XR_NUMBER				VARCHAR2(14 char)	14
YEAR_OF_CONSTRUCTION				VARCHAR2(10 char)	10
VESSEL_ID				NUMBER(19)	19
USER_ID				VARCHAR2(30 char)	30
EXISTS_FLAG			X	NUMBER(1)	1
UPDATE_FLAG				NUMBER(1)	1
FINALISE_FLAG				NUMBER(1)	1
VALID_FLAG				NUMBER(1)	1
INVALID_REASON				VARCHAR2(255 char)	255
DUPLICATE_FLAG			X	NUMBER(1)	1
PROCESSED_FLAG			X	NUMBER(1)	1
FILE_COUNTRY_ISO2_CODE				VARCHAR2(2 char)	2

2.4.1.2.28 Table SSN_CSV_FILES

Code	Primary	Foreign Key	Mandatory	Data Type	Length
DATABASE_ID	X		X	NUMBER	
FILE_CONTEXTS				BLOB	
USER_ID				VARCHAR2(32 char)	32
FILENAME				VARCHAR2(255)	255
FILE_TYPE			X	NUMBER(2)	2
PROCESS_FLAG				NUMBER(1)	1
VALID_FLAG				NUMBER(1)	1
PROCESS_STATUS				VARCHAR2(255)	255

FIELD_DELIMITER				VARCHAR2(5)	5
RECORD_DELIMITER				VARCHAR2(5)	5
CREATED_ON				DATE	
PROCESSED_ON				DATE	

2.4.1.3 References

The referential integrity constraints that are based on the relationships among master and detail tables or the relationships between tables and reference data tables are presented in the following table.

Code	Parent Table	Child Table	Foreign Key Columns	Cardinality
CSD_SOURCE_APPLICATIONS_FK	CSD_SOURCES	CSD_SOURCE_APPLICATIONS	SOURCE_ID	0..*
CSD_SOURCE_PARTICULARS_DET_FK	CSD_SOURCES	CSD_SOURCE_PARTICULARS_DETAILS	SOURCE_ID	0..*
CSD_SOURCE_RFU_FK	CSD_SOURCES	CSD_SOURCE_REASON_FOR_UPDATE	SOURCE_ID	0..*
CSD_VES_INMARSAT_FK	CSD_VESSEL_DETAIL_VERSIONS	CSD_VESSEL_INMARSAT_NUMBERS	VES_DET_ID	0..*
MARS_VESSELS_STG_FILE_FK	SSN_CSV_FILES	MARS_VESSELS_STG	FILE_ID	0..*
MS_VESSELS_FILE_FK	SSN_CSV_FILES	MS_VESSELS	FILE_ID	0..*
RVR_VES_FLAG_FK	CSD_VESSELS	CSD_VESSEL_FLAG_VERSIONS	VES_ID	0..*
VES_DET_HIS_VESSELID_FK	CSD_VESSELS	CSD_VESSEL_DETAIL_HISTORY	VES_ID	0..*
RVR_VES_IMG_FK	CSD_VESSELS	CSD_IMAGES	VES_ID	0..*
RVR_VES_OWNER_FK	CSD_VESSEL_FLAG_VERSIONS	CSD_VES_OWNER	VES_FLAG_ID	0..*

Table 2-13 List of RVD References

2.4.2 Packages

The list of packages is presented hereunder

Package	Description
SSN_CSV_FILES_PKG	SSN CSV uploaded files package.
SSN_RVR_MNG_PKG	Reference VESSEL Repository management procedures
SSN_RVR_EXT_PKG	Reference external data file upload and management procedures
SSN_UTILS_PKG	To provide useful functions like send email, schedule jobs etc.

Table 2-9 List of OVR, CSD Packages

2.4.3 Synonyms

External data sources are referenced via the SYNONYMS defined hereunder.

SYNONYM	COMMENTS
APPLICATION_PARAMETERS	<i>Object Name:</i> APPLICATION_PARAMETERS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_COUNTRIES	<i>Object Name:</i> COUNTRIES <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
MARINFO_LOTA_MAX	<i>Object Name:</i> LOTA_MAX <i>Object Owner:</i> MARINFO <i>Object Type:</i> Table
MARINFO_LOTA_MIN	<i>Object Name:</i> LOTA_MIN <i>Object Owner:</i> MARINFO <i>Object Type:</i> Table
MARINFO_LOTB_MAX	<i>Object Name:</i> LOTB_MAX <i>Object Owner:</i> MARINFO <i>Object Type:</i> Table
MARINFO_LOTB_MIN	<i>Object Name:</i> LOTB_MIN <i>Object Owner:</i> MARINFO <i>Object Type:</i> Table
MARITIME_ID_DIGITS	<i>Object Name:</i> MARITIME_ID_DIGITS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_LOCATION_IMAGES	<i>Object Name:</i> LOCATION_IMAGES <i>Object Owner:</i> EIS_ADMIN

SYNONYM	COMMENTS
	<i>Object Type:</i> Table
EIS_LOCATIONS	<i>Object Name:</i> LOCATIONS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_LOCATION_NAMES	<i>Object Name:</i> LOCATION_NAMES <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_PARTIES	<i>Object Name:</i> <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_VESSEL_DETAIL_HISTORY	<i>Object Name:</i> VESSEL_DETAIL_HISTORY <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_VESSEL_DETAIL_VERSIONS	<i>Object Name:</i> VESSEL_DETAIL_VERSIONS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_VESSEL_IMAGES	<i>Object Name:</i> VESSEL_IMAGES <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_VESSEL_INMARSAT_NUMBERS	<i>Object Name:</i> VESSEL_INMARSAT_NUMBERS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
EIS_VESSELS	<i>Object Name:</i> VESSELS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table
MARITIME_ID_DIGITS	<i>Object Name:</i> MARITIME_ID_DIGITS <i>Object Owner:</i> EIS_ADMIN <i>Object Type:</i> Table

Table 2-14: List of Synonyms