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Circular Letter No.2554/Rev.3
4 March 2014

To: All IMO Member States
Contracting Governments to the International Convention for the Safety of Life at Sea, 1974
United Nations and Specialized Agencies
Intergovernmental Organizations
Non-governmental Organizations in consultative status

Subject: **Implementation of IMO Unique Company and Registered Owner Identification Number Scheme (resolution MSC.160(78))**

GENERAL

1 The *IMO unique company and registered owner identification number scheme* was introduced through the adoption by the Maritime Safety Committee (MSC), at its seventy-eighth session (12 to 21 May 2004), of resolution MSC.160(78), as a measure to enhance maritime safety, security and environmental protection, and to facilitate the prevention of maritime fraud. Its purpose is to assign a permanent number for identification purposes to each company and/or registered owner managing ships of 100 gross tonnage and above engaged on international voyages. Additionally, Administrations are invited to participate in the scheme to the extent they desire by assigning an IMO unique company and registered owner identification number (hereinafter, referred to as "Number") to each company and/or registered owner managing ships of 100 gross tonnage and above not engaged on international voyages.

2 MSC 80 (11 to 20 May 2005), adopted the proposed new SOLAS regulation XI-1/3-1 on the Number and amendments to SOLAS regulation XI-1/5 on the continuous synopsis record (resolution MSC.194(80)), which entered into force on 1 January 2009.

3 MSC 80 also adopted *Amendments to the International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code)* (resolution MSC.195(80)) and *Amendments to the International Code for the Security of Ships and of Port Facilities (International Ship and Port Facility Security (ISPS) Code)* (resolution MSC.196(80)) introducing references to the Number.

4 MSC 82 (29 November to 8 December 2006), considered the outcome of the review by FSI 14 of the procedures for obtaining the Numbers, and the procedures in place for maintaining the integrity of the scheme. This resulted in the addition of a web service, revised data exchange procedures between Administrations and IHS Maritime (formerly known as IHS Fairplay (IHS-F)) and the reporting of the name-style of registered owners as recorded by national Administrations in their jurisdiction. Having also considered that the operational aspects of the numbering scheme may need to be further developed, based on the experience gained,

the Committee requested the Secretariat to make any necessary adjustments, in cooperation with the manager of the scheme, in order to improve the service to be provided to Member States.

5 A 28 (25 November to 4 December 2013) agreed that the IMO ship identification number scheme should be revised to allow its voluntary application to fishing vessels of 100 gross tonnage and above, by adopting resolution A.1078(28), which revokes resolution A.600(15).

PRINCIPLES

6 The *IMO unique company and registered owner identification number scheme* is managed, in parallel with the *IMO ship identification number scheme* (resolution A.1078(28)) and procedures for the implementation thereof (Circular Letter No.1886/Rev.5), without charge by IHS Maritime. The scheme may assign Numbers to companies and/or registered owners of ships not required to have IMO ship identification numbers.

7 The Number is an IHS Maritime IMO number, allocated at the time of issuance of the documents detailed in paragraph 6 of the annex to resolution MSC.160(78) or registration of a ship not required to have these documents. The Number consists of seven digits assigned by IHS Maritime. The label begins with the letters "IMO" followed by either "Company" or "Registered Owner", then followed by the seven digits.

8 "Company" has the same meaning as in SOLAS regulation IX/1. "Registered owner" is the owner specified on a ship's certificate of registry issued by an Administration.

9 New companies and/or registered owners managing ships covered by the scheme are assigned a Number by IHS Maritime when their ship is registered with a flag Administration. For existing companies and/or registered owners, the Number should be assigned at an early convenient date, such as when any document detailed in paragraph 6 of the annex to resolution MSC.160(78) is issued or renewed.

10 Once assigned, the Number remains unchanged for a company and/or registered owner. When companies and/or registered owners merge, as a matter of general policy, IHS Maritime assigns the Number of the larger company and/or registered owner to the new amalgamated entity, while the Number of the smaller entity is frozen and not reused.

11 IHS Maritime maintains a full history audit trail of changes to company and/or registered owner information, with the date of each change recorded. IHS Maritime maintains the history of companies and/or registered owners of ships on its database.

12 IHS Maritime operates under ISO 9001:2008 quality assurance and is ISO-certified for the provisions of publishing and information services to the shipping industry. In order to maintain the integrity of the Numbers in circulation amongst the maritime community, the Administrations should, to the extent allowed by their national law, not publish these Numbers, nor allow the Numbers to be viewed or downloaded from their websites, other than on a company-by-company basis.

13 Contracting Governments to SOLAS retain the right to assign the management of the system to another organization in the future or to manage it by itself. If IHS Maritime cannot continue to maintain the scheme for any reason, all related information acquired from the scheme should be transferred to the Organization.

COLLECTION AND TRANSFER OF INFORMATION AND ASSIGNMENT OF NUMBERS ON AN INDIVIDUAL COMPANY/REGISTERED OWNER BASIS

14 Original information about a company and/or registered owner is collected by the Administration at the time of registration. It is the same information as that routinely collected by Administrations as part of their registration process, namely:

- .1 company/registered owner name-styles;
- .2 country/State of incorporation (registration);
- .3 date of incorporation; and
- .4 full address (operational and registered address) and contact details. IHS Maritime records the operational address of companies and registered owners. The operational address can be the address of a head office or a branch office, or an in-care-of address for the registered owner or company which has been issued with a Document of Compliance (DOC) and managing the ship for which communication details are provided, hereafter called "DOC Company". The IHS Maritime database also records the registered address of registered owners but only under the conditions in paragraph 22.

15 During the registration of a ship, the Administration should contact IHS Maritime to determine the Number to be assigned to the company or registered owner, either through the present methods established for obtaining Numbers on an individual basis, as described in paragraph 17, or, preferably, through the fleet data exchanges (see paragraphs 18, 19 and 20).

16 Numbers can also be obtained by recognized organizations (ROs) authorized to issue Safety Management Certificates and Documents of Compliance on behalf of Administrations, and by registered owners and companies, for submission to the Administration.

17 The methods for obtaining Numbers on existing registered owners and companies, for assigning a Number to registered owners or companies that have not previously been assigned a Number and for communicating corrected company details on existing records, on an individual basis, are as follows:

- .1 a free website (www.imonumbers.lrfairplay.com) which allows registered users to look up Numbers, by using the available "Search" facility. When the companies or registered owners cannot be identified through the "Search" function, authorized data providers should request the assignment of new Numbers or provide corrective information on existing records. The website has a free user registration system to enhance both the security of the site and the information;
- .2 paper request forms (annexes 1 and 2); and
- .3 a free web service for Administrations to facilitate the provision of individual company and registered owner data from IHS Maritime to flag Administrations in an electronic format for ship registration purposes (sections 1.1 and 1.2 of annex 4).

IHS-F would confirm the updated company information received with the appropriate Administration.

STANDARDIZED REGULAR ELECTRONIC DATA EXCHANGE BETWEEN ADMINISTRATIONS AND IHS MARITIME ON A FLEET BASIS

18 When choosing this recommended option, Administrations would implement a regular electronic data exchange procedure with IHS Maritime on a fleet basis (as detailed in section 2 of annex 4, together with the data fields that Administrations should provide electronically (annex 3)) to enable IHS Maritime to maintain the integrity of the scheme. The exchanges provide a mechanism to communicate, per ship, changes to registered owners and companies and their IMO Numbers, on a registered fleet basis, and thus synchronize the information held on the registered fleet by both the Administration and IHS Maritime.

19 The regular electronic data exchange procedure on a fleet basis includes a standardized two-way flow of data between flag Administrations and IHS Maritime on the registered fleet, either by spreadsheet or extensible markup language (XML) file (section 2 of annex 4).

20 IHS Maritime would derive the updates to the registered fleet through electronic comparison with its database. New and updated Numbers would then be returned to the flag Administration in an updated spreadsheet or XML file.

21 Regarding the addition of a second company name field, the IHS Maritime database records the name-style of registered owners as provided by Administrations for companies registered in their national jurisdictions. IHS Maritime can only receive the contents of this field in the XML data format detailed in section 2 of annex 4, since this format should have agreed character sets that are consistent with both the IHS Maritime database software and the software of organizations to which IHS Maritime supplies data (annex 4, paragraph 2.9).

22 The IHS Maritime database also records the registered address of registered owners as provided by Administrations for companies registered in their national jurisdictions. IHS Maritime can only receive the contents of this field in the XML data format detailed in section 2 of annex 4, since this format should have agreed character sets that are consistent with both the IHS Maritime database software and the software of organizations to which IHS Maritime supplies data (annex 4, paragraph 2.9).

CONSULTATION ON NUMBERS

23 The IHS Maritime website (www.imonumbers.lrfairplay.com), with a free user registration system to enhance both the security of the site and the information available, allows registered users to look up Numbers, by using the available "Search" facility, and Administrations, ROs and companies to communicate corrected company details on existing records.

24 Administrations assume no duty to examine, correct, change, alter, or modify information contained on the IHS Maritime free website, nor to notify IHS Maritime of incorrect information contained on the website. Administrations are not liable for mistakes or errors in the information on the website. This website is also available to companies and/or registered owners, who may use it when completing the continuous synopsis record (CSR) (resolution A.959(23)).

25 The Numbers can also be obtained by contacting the national ship registry of the State, the flag of which their ships are entitled to fly or IHS Maritime at the following address:

IHS Maritime
(Part of IHS Global Limited)
Sentinel House
163 Brighton Road
Coulsdon, Surrey CR5 2YH
United Kingdom

Tel.: +44 (0) 2032 532100; Fax: +44 (0) 2032 532102

Web: www.imonumbers.lrfairplay.com

E-mail: fairplay.owners@ihs.com

26 The Numbers are also available on the IMO Global Integrated Shipping Information System (GISIS) module on "Ship Particulars" and on the free public website (www.equasis.org), mobile website (mobile.equasis.org) or apps of Equasis.

27 The circular letter revokes Circular Letter No.2554/Rev.2.

ANNEX 1**REQUEST FOR IMO COMPANY (DOC)
IDENTIFICATION NUMBER**

IHS Maritime
Sentinel House
163 Brighton Road
Coulston, Surrey CR5 2YH
UNITED KINGDOM

Telephone: +44 (0) 2032 532100

International fax: +44 (0) 2032 532102

E-mail:

fairplay.owners@ihs.com

**TO ENABLE ASSIGNMENT OF A COMPANY IDENTIFICATION NUMBER, PLEASE PROVIDE
THE FOLLOWING DETAILS:**

CURRENT COMPANY NAME*

FORMER NAME(S) (if known)

Please indicate if: This is correcting the details for an existing company on the IHS Maritime database

This is a newly established company

This is a change of company name (please give former names above)

This is a company merger (please give former names of all companies above)

DATE OF REGISTRATION

COUNTRY OF REGISTRATION

OPERATIONAL ADDRESS*

TOWN*

POSTAL/ZIP CODE*

COUNTRY*

TELEPHONE

E-MAIL

IF KNOWN PARENT COMPANY

FAX

WEBSITE

IMO ship identification number(s) *

If not available other ship details (please supply at least one IMO ship identification number in the current fleet.

This helps in the identification of company records)

Company requesting IMO Number

COMPANY NAME*

CONTACT NAME*

SENDER'S E-MAIL *

SENDER'S FAX NUMBER*

Items indicated with an asterisk (*) are required and must be filled in before a number can be provided.

It is the policy of IHS Maritime to record the operational addresses of companies which have been issued with a Document of Compliance (DOC). The operational address can be the address of a head office or a branch office, or a care-of address for the manager or company which has been issued with a DOC and managing the ship for which communication details are provided.

The country of registration of the company which has been issued with a DOC is also recorded.

For office use only:

IMO Company No.

ANNEX 2**REQUEST FOR IMO REGISTERED OWNER
IDENTIFICATION NUMBER**

IHS Maritime
Sentinel House
163 Brighton Road
Coulsdon, Surrey CR5 2YH

UNITED KINGDOM

Telephone: +44 (0) 2032 532100
International fax: +44 (0) 2032 532102
E-mail: fairplay.owners@ihs.com

**TO ENABLE ASSIGNMENT OF A REGISTERED OWNER IDENTIFICATION NUMBER,
PLEASE PROVIDE THE FOLLOWING DETAILS:**

CURRENT COMPANY NAME*
FORMER NAME(S) (if known)

Please indicate if: This is correcting the details for an existing company on the IHS Maritime database
This is a newly established company
This is a change of company name (please give former names above)
This is a company merger (please give former names of all companies above)

DATE OF REGISTRATION
COUNTRY OF REGISTRATION
OPERATIONAL ADDRESS*

TOWN*

POSTAL/ZIP CODE*

COUNTRY*

TELEPHONE

FAX

E-MAIL

WEBSITE

IF KNOWN PARENT COMPANY

IMO ship identification number(s)*

If not available other ship details (please supply at least one IMO ship identification number in the current fleet.
This helps in the identification of company records)

Company requesting IMO Number

COMPANY NAME*

CONTACT NAME*

SENDER'S E-MAIL*

SENDER'S FAX NUMBER*

☐ This company has also been issued with a DOC for this fleet

Items indicated with an asterisk (*) are required and must be filled in before a number can be provided.

It is the policy of IHS Maritime to record the operational addresses of registered owners. The operational address can be the address of a head office or a branch office, or a care-of address for the manager or company which has been issued with a DOC and managing the ship for which communication details are provided.

IHS Maritime only records the Registered Address of Registered Owners when this information is received directly from Administrations in the XML schema described in section 2 of annex 4.

The country of registration of the registered owner is also recorded.

For office use only:

IMO Registered Owner No.

ANNEX 3**FIELD LIST DESCRIPTIONS OF DATA TO BE EXCHANGED BETWEEN FLAG ADMINISTRATIONS AND IHS Maritime ON SHIPS IN THE ADMINISTRATION'S REGISTER**

| | FIELD LABEL | FIELD DESCRIPTION |
|----------------------|----------------------------|---|
| SHIP IDENTITY | | |
| | Source | Reporting Administration country |
| | IMO_Number | IMO Ship identification number |
| | ShipName | Ship name |
| | MMSI | MMSI number |
| | PortOfRegistry | Port of Registry as recorded on the ship's papers |
| | OfficialNumber | Number allocated by the national registration authority |
| | CallSign | Call sign |
| SHIP FIELDS | | |
| | GrossTonnage69Convention | Gross tonnage measured under the International Convention on Tonnage Measurement of Ships, 1969 (1969 Convention) |
| | GrossTonnageFlagConvention | Pre-1969 Convention gross tonnage measurement, as provided by the reporting (source) Administrations. IHS Maritime will maintain this field on their database. Note that IHS Maritime is only able to accept the contents of this field from Administrations in the agreed electronic format. |
| | NetTonnage69Convention | Net tonnage measured under the International Convention on Tonnage Measurement of Ships, 1969 (1969 Convention) |
| | NetTonnageFlagConvention | Pre-1969 Convention net tonnage measurement, as provided by the reporting (source) Administrations. IHS Maritime will maintain this field on their database. Note that IHS Maritime is only able to accept the contents of this field from Administrations in the agreed electronic format. |
| | DeadWeight | The weight in tonnes (1,000 kg) of cargo, stores, fuel and passengers and crew carried by the ship when loaded to her maximum summer load line |
| | YearOfBuild | Year ship was officially completed by the shipyard and delivered to the owner |
| | MonthOfBuild | Month ship was officially completed by the shipyard and delivered to the owner |
| | Shipbuilder | The name of the original builder of the ship |
| | CountryOfShipbuilderCode | The nationality of the shipyard that built the ship; IHS Maritime Country Code* |
| | CountryOfShipbuilderDecode | The nationality of the shipyard that built the ship. |

| | FIELD LABEL | FIELD DESCRIPTION |
|--------------------|---|--|
| SHIP FIELDS | | |
| | IHS MaritimeShipTypeCode | IHS Maritime Shiptype Code* |
| | IHS MaritimeShipTypeDecode | IHS Maritime Shiptype description |
| | AdminShipTypeDescription | Reporting (source) Administration ship type description. IHS Maritime will maintain this field on their database. Note that IHS Maritime is only able to accept the contents of this field from Administrations in the agreed electronic format. |
| | IMO_RegOwnerNumber | IMO Registered Owner number. For parallel-registered ships, this number is given to the owner under the parallel-out Registry. |
| | RegOwnerNameAdminNamestyle | Registered Owner name in the name-style provided by Administrations for companies registered in their national jurisdiction. IHS Maritime will maintain this field on their database. Note that IHS Maritime is only able to accept the contents of this field from Administrations in the agreed electronic format. |
| | RegOwnerNameIHS MaritimeNamestyle | Registered owner name in the name-style recorded by IHS Maritime. Minor amendments may be made to names in accordance with a style guide, for database reasons |
| | RegOwnerRegisteredAddress Admin | Registered Owner registered address as provided by Administrations for companies registered in their national jurisdiction. IHS Maritime will maintain this field on their database. Note that IHS Maritime is only able to accept the contents of this field from Administrations in the agreed electronic format. |
| | RegOwnerCountryOfRegistration Code | Registered Owner country of company registration; IHS Maritime Country Code* |
| | RegOwnerCountryOfRegistration Decode | Registered Owner country of company registration |
| | RegOwnerDateFounded | Date the Registered Owner was established |
| | IMO_ DOC_ CompanyNumber | IMO Company (DOC) Number |
| | DOC_ CompanyName | DOC Company |
| | DOC_ CompanyFullAddress | DOC Company full business address as reported on the 1st page of the SMC and DOC Certificates |
| | DOC_ CompanyTown | DOC Company town |
| | DOC_ CompanyState | DOC Company State/Province/County |
| | DOC_ CompanyPostCode | DOC Company Postcode |
| | DOC_ CompanyCountryDomicileCode | DOC Company country of domicile; IHS Maritime Country Code* |

| | FIELD LABEL | FIELD DESCRIPTION |
|--|---------------------------------------|---|
| SHIP FIELDS | | |
| | DOC_CompanyCountryDomicile Decode | DOC Company country of domicile |
| | DOC_CompanyCountryRegistration Code | DOC Company country of registration IHS Maritime Code* |
| | DOC_CompanyCountryRegistration Decode | DOC Company country of registration |
| | DOC_CompanyFoundedDate | DOC Company founded d ate |
| | SMC_Auditor | SMC Auditor |
| | SMC_DateIssued | SMC Date issued |
| | SMC_ExpiryDate | SMC Expiry date |
| | DOC_Auditor | DOC Auditor |
| | DOC_DateIssued | DOC Date issued |
| | DOC_ExpiryDate | DOC Expiry date |
| ADDITIONAL FIELDS FOR PARALLEL-REGISTERED SHIPS | | |
| | ParallelRegister | For parallel-in ships the Administration where the ship's true ownership is registered. For parallel-out ships, the Administration to which the ship is bareboat chartered. |
| | BareBoat_Charterer | For parallel-registered ships, the name of the Bareboat Charterer under the Parallel-In Registry |
| SHIP STATUS FIELDS | | |
| | FlagStatus | P = Ship in register (Permanent or Provisional) PI = Parallel-in ship PO = Parallel-out ship D = Ship deleted from register (IHS Maritime will report ships deleted from the register within 6 months prior to the update) |
| | ShipStatusCode | Current service status e.g. in service, laid up, under construction, in repair, in conversion; IHS Maritime Code* |
| | ShipStatusDecode | Current service status |
| | DateShipEnteredRegister | Date ship entered the reporting (source) register |
| | DateShipDeletedFromRegister | Date ship deleted from the reporting (source) register |
| | NewRegisterOfShipsCode | New Administration of ships deleted from the reporting (source) register; IHS Maritime Country Code* |
| | NewRegisterOfShipsDecode | New Administration of ships deleted from the reporting (source) register |

| | FIELD LABEL | FIELD DESCRIPTION |
|--|-------------------------------|--|
| SHIP STATUS FIELDS | | |
| | ReportedNewFlagCode | Reported new flag. This field will be used by IHS Maritime to confirm a flag change reported by the Administration, or to identify a reported flag change from the IHS Maritime network of sources; IHS Maritime Country Code* |
| | ReportedNewFlagDecode | Reported new flag. |
| | ReportedBrokenUp | Reported broken up |
| | ReportedToBeBrokenUp | Reported to be broken up |
| | ReportedTotalLoss | Reported total loss |
| ADDITIONAL FIELDS FOR PARALLEL-REGISTERED SHIPS | | |
| | DateShipParallelOut | For parallel-out ships, the date the ship was bareboat chartered. |
| | DateShipReturnFromParallelOut | For former parallel-out ships, the date the ship returned to the permanent register of the reporting (source) Administration. |

* the IHS Maritime Coding systems are available to Administrations should they wish to use them. Otherwise, Administrations should report data in the relevant "decode" fields.

Electronic format options:

- (i) by spreadsheet (see paragraph 19) : Excel or Access
- (ii) by XML file (see paragraph 19, section 2 of annex 4 and appendix)

ANNEX 4

**WEB SERVICE TO FACILITATE THE ELECTRONIC PROVISION OF COMPANY,
REGISTERED OWNER AND SHIP DATA TO ADMINISTRATIONS;
AND THE TWO-WAY EXCHANGE OF INFORMATION
BETWEEN ADMINISTRATIONS AND IHS Maritime**

1 IHS Maritime launched a web service for the exclusive use of Administrations. Access to this service could also be made via the IMO Global Integrated Shipping Information System (GISIS). The web service offers two data services:

- .1 a download of company and registered owner data from the IHS Maritime database on entry by the Administration of an IMO Company or Registered Owner Number, or the name of the company
 - .1.1 this data would allow the Administration to validate company data against the IMO company or registered owner number for insertion in the ship's documents as detailed in resolution MSC.160(78);
 - .1.2 the following fields will be downloaded from IHS Maritime:
 - IMO company or registered owner number
 - Registered owner or company name (IHS Maritime name-style)
 - Registered owner name (Administration name-style)
 - Operational address
 - Registered owner registered address
 - Country of Registration Code (IHS Maritime Code)
 - Country of Registration; and
 - .1.3 the format would be XML according to the schema in the appendix to annex 4; and
- .2 a download of ship data from the IHS Maritime database on entry by the Administration of an IMO ship identification number or shipname;
 - .2.1 this data would allow the Administration to validate ship data against the IMO ship identification number;
 - .2.2 the following fields would be downloaded from IHS Maritime:
 - IMO Ship identification number
 - Official Number
 - Ship name
 - Port of registry Code (IHS Maritime Code)
 - Port of registry
 - Call sign
 - Maritime Mobile Service Identity (MMSI) number
 - Gross tonnage
 - Net tonnage
 - Date of build year
 - Date of build month
 - Type of ship code (IHS Maritime Statcode5)
 - Type of ship decode
 - Flag Code (IHS Maritime Code)
 - Flag
 - Ship Status; and
 - .2.3 the format would be extensible markup language (XML) according to the schema in the appendix to annex 4.

2 The data exchange will provide an update of ship and company data on a registered fleet to IHS Maritime at a regular frequency, or when details of ships in each registered fleet change. The same mechanism could be used to supply updates from IHS Maritime to the Administration.

2.1 This data exchange includes ships within the scope of the IMO Company and Registered Owner Numbering Scheme: all ships of 100 GT and above, including fishing vessels, engaged in international or domestic voyages.

2.2 The ships reported by each Administration are those in provisional, permanent, parallel-in and parallel-out registration.

2.3 The data exchange can be by spreadsheet or by XML file. The service would use standardized data formats which would make easier data transfer and integration into databases.

2.4 The fields to be updated are listed with full field descriptions in annex 3. Each update record will consist of the ship identity fields followed by any field in the list that has changed since the last update.

2.5 The XML file would use the schema described in the appendix.

2.6 The proposed update frequency will be agreed with each Administration: for example, transmission of the ship record at the point of change, or batch transmission of ship records daily, weekly or monthly.

2.7 Each Administration would be responsible for generating its XML files.

2.8 Tables of translation code cross references between country and shiptype coding systems used by Administrations and the IHS Maritime coding systems can be supplied by IHS Maritime.

2.9 Within the XML schema, language and character sets should be defined to ensure consistent translation between different international code sets.

2.10 The delivery of the XML files can take place in various ways. These can be discussed with each Administration to agree the best method.

Appendix

FIELD LIST XML SCHEMA AND UPDATE RULES

1 Ship identity

1.1 The first seven data items in the XML file identify the ship:

```
<xsd:element name="Source" minOccurs="1" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string"> <xsd:maxLength value="40"/>
</xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="IMO_Number" minOccurs="1" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="7"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ShipName" minOccurs="1" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="50"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="MMSI" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string"> <xsd:maxLength value="9"/>
</xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="PortOfRegistry" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="39"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="OfficialNumber" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="13"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="CallSign" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="13"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
```

1.2 The first three have a minOccurs="1" which means that they must be present for all ships in the XML file. MMSI, although it is part of the ship identity, has a minOccurs="0" which means that it doesn't have to appear in the XML file. All other data items in the schema have minOccurs="0" and these only appear if the data item is present (in a replacement update), or has changed (in a changes update).

2 Ship fields

```
<xsd:element name="GrossTonnage69Convention" minOccurs="0" od:jetType="longinteger"
od:sqlSType="int"> <xsd:simpleType> <xsd:restriction base="xsd:integer"/>
</xsd:simpleType> </xsd:element>
<xsd:element name="GrossTonnageFlagConvention" minOccurs="0"
od:jetType="longinteger" od:sqlSType="int"> <xsd:simpleType> <xsd:restriction
base="xsd:integer"/> </xsd:simpleType> </xsd:element>
<xsd:element name="NetTonnage69Convention" minOccurs="0" od:jetType="longinteger"
od:sqlSType="int"> <xsd:simpleType> <xsd:restriction base="xsd:integer"/>
</xsd:simpleType> </xsd:element>
<xsd:element name="NetTonnageFlagConvention" minOccurs="0" od:jetType="longinteger"
od:sqlSType="int"> <xsd:simpleType> <xsd:restriction base="xsd:integer"/>
</xsd:simpleType> </xsd:element>
<xsd:element name="DeadWeight" minOccurs="0" od:jetType="longinteger"
od:sqlSType="int"> <xsd:simpleType> <xsd:restriction base="xsd:integer"/>
</xsd:simpleType> </xsd:element>
```

```
<xsd:element name="YearOfBuild" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="4"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="MonthOfBuild" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="2"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="Shipbuilder" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="50"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="CountryOfShipbuilderCode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="3"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="CountryOfShipbuilderDecode" minOccurs="0" od:jetType="text"
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<xsd:maxLength value="40"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="7"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="RegOwnerNameAdminNamestyle" minOccurs="0" od:jetType="memo"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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od:jetType="memo" od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction
base="xsd:string">
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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base="xsd:string"> <xsd:maxLength value="3"/> </xsd:restriction> </xsd:simpleType>
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base="xsd:string"> <xsd:maxLength value="40"/> </xsd:restriction> </xsd:simpleType>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="4"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="7"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="327"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
```

```

<xsd:element name="DOC_CompanyFullAddress" minOccurs="0" od:jetType="text"
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<xsd:maxLength value="250"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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base="xsd:string">
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base="xsd:string"> <xsd:maxLength value="3"/> </xsd:restriction> </xsd:simpleType>
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od:jetType="text" od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction
base="xsd:string"> <xsd:maxLength value="40"/> </xsd:restriction>
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<xsd:maxLength value="20"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="SMC_DateIssued" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="SMC_ExpiryDate" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="DOC_Auditor" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="20"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="DOC_DateIssued" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="DOC_ExpiryDate" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="ParallelRegister" minOccurs="0" od:jetType="text"
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<xsd:maxLength value="40"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="BareBoat_Charterer" minOccurs="0" od:jetType="memo"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="327"/> </xsd:restriction> </xsd:simpleType> </xsd:element>

```

3 Ship status fields

```
<xsd:element name="FlagStatus" minOccurs="0" od:jetType="text" od:sqlSType="nvarchar">
<xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="2"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ShipStatusCode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="1"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ShipStatusDecode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="50"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="DateShipEnteredRegister" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="DateShipDeletedFromRegister" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/>
<xsd:element name="NewRegisterOfShipsCode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
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<xsd:element name="NewRegisterOfShipsDecode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="40"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ReportedNewFlagCode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="3"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ReportedNewFlagDecode" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="40"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
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od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="1"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ReportedToBeBrokenUp" minOccurs="0" od:jetType="text"
od:sqlSType="nvarchar"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="1"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="ReportedTotalLoss" minOccurs="0" od:jetType="text"
od:sqlSType="char"> <xsd:simpleType> <xsd:restriction base="xsd:string">
<xsd:maxLength value="1"/> </xsd:restriction> </xsd:simpleType> </xsd:element>
<xsd:element name="DateShipParallelOut" minOccurs="0" od:jetType="datetime"
od:sqlSType="dateTime"/> <xsd:element name="DateShipReturnFromParallelOut"
minOccurs="0" od:jetType="datetime" od:sqlSType="dateTime"/> </xsd:sequence>
</xsd:complexType> </xsd:element>
```

4 Example

```
<Ship>
<Source>PANAMA</Source>
<IMO_Number>9876543</IMO_Number>
<ShipName>EXAMPLEONESHIP</ShipName>
<MMSI>123456700</MMSI>
<PortOfRegistry>Panama</PortOfRegistry>
<OfficialNumber>D1234PEXT6</OfficialNumber>
<ReportedBrokenUp>Y</ReportedBrokenUp>
</Ship>
```