No. Format for Electronic Exchange and Standard Reports

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Abstract:

This document details "Unified Data Exchange Format (UDEF)" for electronic exchange of class and statutory data between IACS Member Societies and Flag States.

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1. Electronic Access to Class and Statutory Data

1.1 Introduction

- 1.1.1 This document details the data requirements that have been developed to facilitate the exchange of class and statutory data by IACS Member Societies with flag state administrations. Two means of exchange are defined in this document:
- **Electronic exchange:** Data definitions and data fields for the electronic exchange of data are detailed. The mechanism of exchange is explained below.
- **Formats and Layout** standards are shown for the visual presentation of the data using an online system.

1.2 Electronic Exchange and online viewing

- 1.2.1 The societies shall not provide printed information except by special cases. It is the responsibility of individual flag states to access the information and produce any relevant reports based on the data collected.
- 1.2.2 Access to the information shall be at the discretion of the individual society. Each society is invited to develop and run at its server the converting software to make the society's data compatible with the data format as described below.
- 1.2.3 This implementation of Unified Data Exchange Format (UDEF) will make data from all societies available and harmonized for further processing and allow arrangement of Single window reporting, were any end user may collect complete and reliable data.
- 1.2.4 Usage of aggregating server software, based at any/some/all Member's server(s) or at IACS server, or specially designed application software installed at the end user's computer may provide Flag states or other organizations with the complete data in single report irrelatively of a number of IACS members performing activities on behalf of the Flag state.
- 1.2.5 The advantages UDEF may encourage IACS Members to facilitate processes of data supply for flag states and stimulate IACS for further integration of "Single Window" reporting in the IMO RO Code.
- 1.2.6 For the purposes of electronic exchange of data with flag state the anticipated means of exchange will be by XML files via Web service. The formats of data are shown in the relevant section of the document.
- 1.2.7 As a temporary measure the XML file may be generated by IACS Member(s) and sent by e-mail/ftp on single or regularly bases to flag state(s). Frequency is the subject of bilateral Agreement with flag state(s).
- 1.2.8 The e-mail/ftp must be secured in the proper way against any misuses or fraud acts.
- 1.2.9 Other means of data/file formats should be investigated as technology improves.

1.3 Report formats

1.3.1 A set of standard report formats has been developed for presenting key information on ships and management companies to flag states in a consistent manner.

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1.3.2 The following report formats have been developed:

- Periodical List of Certificates Issued, listing all certificates issued by the society on behalf of the flag state along with associated survey dates.
- Periodical Report of Ship Management Company Audits, for each company, audit information is shown, giving the status of approval for the various ship types mentioned in the ISM Code, ISPS Code, MLC, the audit type and date, and the certificate date of issue and date of expiry.
- Ship Survey Status Report, this report provides basic information about a ship, together with a listing of the current survey range dates and survey status. A list of ship comments is appended to the report.
- 1.3.3 It is anticipated that each society would implement systems for producing reports, in the agreed format, as part of their existing corporate database systems.

1.4 Data Formats

- 1.4.1 All dates exchanged shall be in the form of yyyy-mm-dd (ISO 8601).
- 1.4.2 All numeric data exchanged shall be used without thousand separator.
- 1.4.3 Special characters used by individual societies, e.g. in Class Notations, which are not present in the standard character sets are to be substituted by an appropriate alternative character(s) as deemed appropriate by the individual society concerned.

1.5 Security

1.5.1 The data shall be reasonably protected. Any user's or aggregation software must be properly validated with appropriate access granted.

1.6 Reporting of ISM, ISPS, MLC Information

1.6.1 Administrations should be aware that ISM, ISPS and MLC reporting from a single RO may not be complete.

2. Electronic Exchange

2.1 Introduction

- 2.1.1 This document does not affect internal data processing of any IACS member and does not specify the means of exchange or requirements for server, user's or aggregation software.
- 2.1.2 For the UDEF implementation IACS members are invited to develop and run at their servers specific software for translating external requests and returning the selected data from their databases to the initiators of requests.

2.2 Operation

2.2.1 The external requests must operate only with the data fields named in the Table No.1 below. The scope of data may vary on Flag state's requests, but not exceed the data fields named in the Table No.1.

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2.2.2 Some typical reports are shown in Para. 3 - Format of reports.

Table 1.

(cont)

GENERAL DATA				
Field	Mand atory	Туре	Format / Max Field Size	Comments
RO	Y	Text	20	RO may be one of the following codes: ABS=American Bureau of Shipping BV=Bureau Veritas CCS=China Classification Society CRS=Croatian Register of Shipping VL=DNV GL IRS=Indian Register of Shipping KR=Korean Register of Shipping LR=Lloyd's Register of Shipping NK=Nippon Kaiji Kyokai PRS=Polish Register of Shipping RINA=RINA Services S.p.A. RS=Russian Maritime Register of Shipping Non-IACS members ROs may use other codes and abbreviations.
Date	Y	Date	yyyy- mm-dd	Export date
Release	Y	Num ber	2	Release Number of the data protocol.
CLASSED_SHIPS				
SHIP_Name	Υ	Text	40	
SHIP_Build_Date	Υ	Date	yyyy- mm-dd	
SHIP_Keel_Laid_Date	Y	Date	yyyy- mm-dd	
SHIP_Class_Entry_Dat e	Υ	Date	yyyy- mm-dd	Date of entry into class of the RO.
SHIP IMO Number	N	Text	7	IMO Number may not be available.
SHIP_Flag	Υ	Text	3	Country Name in accordance with ISO 3166-1 alpha-3.
SHIP_Classed_By	Y	Text	20	ABS=American Bureau of Shipping BV=Bureau Veritas CCS=China Classification Society CRS=Croatian Register of Shipping VL=DNV GL IRS=Indian Register of Shipping KR=Korean Register of Shipping LR=Lloyd's Register of Shipping NK=Nippon Kaiji Kyokai PRS=Polish Register of Shipping RINA=RINA Services S.p.A. RS=Russian Maritime Register of Shipping Non-IACS members may use other codes and abbreviations.
SHIP_Class_Number	N	Text	8	

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SHIP_Port_Of_Registry	N	Text	50	Port Name in accordance with UNECE
				code:
				http://www.unece.org/cefact/locode/service/
				location.html
SHIP_Date_Of_Registr	N	Date	уууу-	Date of registration at Flag State.
У			mm-dd	
SHIP_ Registry	N	Num	20	Number of registration in the Port Registry.
Number	N.I.	ber	40	
SHIP_Call_Sign	N	Text	10	OT 07 T
SHIP_General_Type_d	Υ	Text	50	OT - Oil Tanker CT - Chemical Tanker
escription				GT - Gas Tanker
				LC - Other Bulk Liquid Carrier
				BC - Bulk Carrier (all combinations OB,
				OBO, OO)
				GC - General Cargo Vessel (including Ro-
				Ro Cargo, Container, Reefer, HSC Cargo)
				PS - Passenger Vessel (including
				Passenger / General Cargo, Passenger /
				Ro-Ro, Passenger HSC)
				ZZ - Other Vessel Type
SHIP_Class_Status	Υ	Text	1	Class_Status may be one of the following
				codes:
				V=Class valid
				S=Class suspended
CLUD Chin Status	Υ	Text	1	W=Class Withdrawn
SHIP_Ship_Status	Y	rext	I	Ship_Status may be one of the following codes:
				E=In service
				L=Laid Up
				P=Lost
SHIP Class Notation	Υ	Text	500	Class Service Notation assigned by the RO
				(free text).
SHIP_Gross_Tons	Υ	Num	9,2	Format: 9999999,99 GT as defined in the
		ber		International Tonnage Convention of 1969
				or tons for National Tonnage.
SHIP_Deadweight	N	Num	7	In tones, as required for Gas, Oil and
		ber		Chemical Tankers.
SHIP_Registered_Own	Υ	Text	250	Registered Owner name: official name of
er				the ship owner according to the Certificate
				of Registry and published on the Register
SHID ISM Shinowns	NI	Text	7	Book.
SHIP_ISM_Shipowner_ IMO	N	rext	<i>'</i>	IMO Company Number of the company indicated on the ISM SMC certificate.
SHIP ISM Shipowner	N	Text	80	Name of the company indicated on the ISM
Or III _IOWI_OIIIPOWIIEI	13	1 GVI	00	SMC certificate.
SHIP_MLC_Shipowner	N	Text	8	MLC Shipowner ID is the unique identifier
_ID	. •	· OAt		assigned by the classification society to
				identify the Shipowner as defined in Article
				II of MLC, 2006.
SHIP_MLC_Shipowner	N	Text	80	MLC Owner name

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MMS SHIPS							
SHIP Name	Υ	Text	40				
SHIP IMO Number	N	Text	7	IMO Number may not be available.			
SHIP_Flag	Υ	Text	3	Country Name in accordance with ISO			
				3166-1 alpha-3.			
SHIP_Port_Of_Registry	Y	Text	50	Port Name in accordance with UNECE code: http://www.unece.org/cefact/locode/service/location.html			
SHIP_Date_Of_Registr	N	Date	yyyy- mm-dd	Date of registration at Flag State.			
SHIP_Registry_Number	N	Num ber	20				
SHIP Call Sign	N	Text	10				
SHIP_ISM_Type	N	Text	8	SHIP_ISM_Type may be one or two (separated by " ") of the following codes: BC=Bulk carrier CH=Cargo high speed craft CT=Chemical tanker GC=Gas carrier MO=Mobile offshore drilling unit OT=Oil tanker OC=Other cargo ship PH=Passenger high speed craft PS=Passenger ship PR=Passenger ferry (ro-ro)			
SHIP_ISM_Shipowner_ IMO	N	Text	7	IMO Company Number of the company indicated on the ISM SMC certificate.			
SHIP_ISM_Shipowner	N	Text	80	Name of the company indicated on the ISM SMC certificate.			
SHIP_MLC_Shipowner _ID	N	Text	8	MLC_Shipowner_ID is the unique identifier assigned by the classification society to identify the Shipowner as defined in Article II of MLC, 2006.			
SHIP_MLC_Shipowner SHIP_CERTIFICATE	N	Text	80	MLC Owner name			
SHIP_CERTIFICATE_ Number	Y	Text	20	The number or other ID of the document issued.			
SHIP_CERTIFICATE_ Status	Y	Text	1	It must be one of the following codes: V (Valid), S (Suspended), W (Withdrawn)			
SHIP_CERTIFICATE_ Remark	Υ	Text	2	00 - means the Certificate is alone of this type; Ux - means that there are several certificates of the same type, one active and the others sealed-up; "x" is an integer number between 1 and 9 that identify the sets of the certificates (U1 U9) All the certificates of the same set have the same code (e.g. U5 of LL must be also marked U5 for TONNAGE, IOPP, e.t.c.)			
SHIP_CERTIFICATE_I ssued_By	Υ	Text	20	The name of the organization which issued the certificate. If this is the IACS classification society, then the code defined in SHIP_Classed_by is used.			

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				If the certificate is not issued by the RO, the
				certificate data could be not available.
SHIP_CERTIFICATE_	Υ	Text	5	Certificate_code is used to identify the
Code				certificate type. The code used must be
				one of the following:
				AFS=International Anti-Fouling System
				Certificate
				BWM=International Ballast Water
				Management Certificate
				SC=Cargo Ship Safety Construction
				Certificate
				SE=Cargo Ship Safety Equipment
				Certificate
				SR=Cargo Ship Safety Radio Certificate
				BCH=Certificate of Fitness for Carriage of Dangerous Chemicals in Bulk (BCH Code)
				GC=Certificate of Fitness for Carriage of
				Liquefied Gases in Bulk (GC Code)
				CAS=Conditional Assessment Scheme
				CA=Crew Accommodation Certificate
				DSC=Dynamically Supported Craft
				Construction and Equipment Certificate
				DOC=Document of Compliance (ISM
				Code)
				HSCS=High-Speed Craft Safety Certificate
				IAPP=International Air Pollution Prevention
				Certificate
				IBC=International Certificate of Fitness for
				Dangerous Chemicals in Bulk (IBC Code)
				IGC=International Certificate of Fitness for
				Carriage of Liquefied Gases in Bulk (IGC Code)
				ILL=International Load Line Certificate
				IOPP=International Oil Pollution Prevention
				Certificate
				NLS=International Pollution Prevention
				Certificate for the Carriage of Noxious
				Liquid Substances in Bulk (NLS Certificate)
				ISPP=International Sewage Pollution
				Prevention Certificate
				ISS=International Ship Security Certificate
				IT=International Tonnage Certificate
				MODU=Mobile Offshore Drilling Unit Safety Certificate
				Certificate PSS=Passenger Ship Safety Certificate
				SMC=Safety Management Certificate (ISM
				Code)
				SPSS=Special Purpose Ship Safety
				Certificate
				ML=Maritime Labour Certificate
				DOCDG=Document of Compliance
				(Dangerous Goods) (SOLAS Reg II-2/19)
				INF=International Certificate of Fitness for
				the Carriage of INF Cargo (INF Code)
				CRGGR=ILO Cargo Gear Certificate

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				CRGSS=Cargo Ship Safety Certificate EEFFC=Energy Efficiency Certificate CLASS=Classification Certificate NOCRT=Survey handled, but no certificate issued NAPP=National* Air Pollution Prevention Certificate NLL=National* Load Line Certificate NOPP=National* Oil Pollution Prevention Certificate NT=National* Tonnage Certificate OTHER=Other Certificate
SHIP_CERTIFICATE_ Validity_Type	Y	Text	1	(*) Relating to National Rules of the Flag State Is used to identify the validity type of the certificate issued. It must be one of the following codes: F=Full Term issue I=Interim/Unconditional Issue S=Short term (a certificate valid for a maximum period of 5 months, issued in order to bridge the time until the Full Term Certificate is received on board) C=Conditional (certificate issued when deficiencies exists and it is valid for a period only long enough to permit the ship to proceed to the port where the deficiencies can be rectified)
SHIP_CERTIFICATE_ Category	Υ	Text	1	Is used to identify the type of the certificate issued. It must be one of the following codes: S=Standard Standard Certificates are those issued on behalf of a "Signatory State" (a State which has accepted and ratified the relevant Convention) to a "Convention ship" (a ship to which regarding their size, type and/or trading area the provisions of the relevant Convention are applicable). D=Document of compliance Documents of Compliance are those issued on behalf and upon specific authorization of a "Non-Signatory State" (a State which has not yet accepted and ratified the relevant Convention). C=Statement of compliance (not on behalf of the flag) Statement of compliance are those issued by the RO not on behalf of any Flag Administration. They are issued upon request of the Owner in cases where an

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				authorization to issue a Statutory Certificate does not exist. N=Non convention Non-Convention Certificates are those issued on behalf and upon specific authorization of a "Signatory State" (a State which has accepted and ratified the relevant Convention) to a "Non-Convention ship" (a ship to which regarding their size, type and/or trading area the provisions of the relevant Convention are not applicable). F=Statement for Issue Statement for Issue are those issued by the RO, on the basis of which the certificate is issued by the competent Authority. V=Voluntary Document issued upon request of the Owner in cases different from ones listed above.
SHIP_CERTIFICATE_ Description	N	Text	120	A field for the further description of the certificate code. This is required if the SHIP_CERTIFICATE_Code = "OTHER".
SHIP_CERTIFICATE_I ssue_Date	Y	Date	yyyy- mm-dd	
SHIP_CERTIFICATE_ Expiry_Date	N	Date	yyyy- mm-dd	
SHIP_CERTIFICATE_ Declaration_Date	N	Date	yyyy- mm-dd	MLC Declaration Date (MLC Declaration date and place may be different with the certificate date and place).
SHIP_CERTIFICATE_ Declaration_Place	N	Text	50	UNECE code: http://www.unece.org/cefact/locode/service/ location.html

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SURVEYS /AUDITS				
SHIP SURVEY Code	Υ	Text	5	See the SHIP CERTIFICATE Code. For
				the class surveys this shall be "CLASS".
SHIP SURVEY Type	Υ	Text	5	For statutory surveys
				SHIP SURVEY Type
				must be one of the following:
				A=Annual survey, annual survey or
				periodical inspection;
				AD=Additional/Occasional survey;
				B=Inspection of the outside of the ship's
				bottom (dry);
				W=Inspection of the outside of the ship's
				bottom (iws)
				T=Tailshaft (They could be more than one:
				T1, T2, etc)
				Bo=Boiler (They could be more than one:
				Bo1, Bo2, etc)
				I=Initial survey;
				IN=Intermediate survey;
				P=Periodical survey;
				R=Renewal survey;
				Int=Interim /pre-audit /pre-verification (for
				ISM, ISPS, MLC certificates);
				For classification surveys
				SHIP_SURVEY_Type will be in accordance
				with the rules, regulations and practice of
				the particular classification society which
				has classed the ship.
SHIP SURVEY Descri	Υ	Text	120	The class society specific description.
ption				
LAST			I.	
SHIP SURVEY Held	Υ	Date	уууу-	
Date			mm-dd	
SHIP SURVEY Place	Υ	Text	50	UNECE code:
_Held				http://www.unece.org/cefact/locode/service/
_				location.html
NEXT	1	1	ı	
SHIP_SURVEY_Due_	N	Date	уууу-	
Date			mm-dd	
SHIP SURVEY Postp	N	Date	уууу-	
onement Date			mm-dd	
SHIP_SURVEY_Status	Υ	Text	1	To be filled in only for survey not yet carried
				out or completed. It would be one of the
				following:
				D=the current date is within the survey
				range dates.
				O=the current date is after the survey
				range to date.
				P=the survey has been started but is not
				yet complete.
				B=before the survey range dates.
				The contents of this field may be calculated
				at run-time.
SHIP SURVEY Range	N	Date	уууу-	
	1		<i> </i>	1

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From Date			mm-dd	
SHIP_SURVEY_Range	N	Date	уууу-	
To Date	11	Date	mm-dd	
COMMENTS				
SHIP_COMMENT_Typ e	Υ	Text	1	It would be normally one of the following: M="Memorandum" R="Recommendation"
SHIP_COMMENT_Cert ificates	N	Text	500	List of certificates, separated by comma, linked to the Comment Mandatory only for "Recommendation".
SHIP_COMMENT_Dat e_Issued	Υ	Date	yyyy- mm-dd	
SHIP_COMMENT_Plac e_Issued	N	Text	50	Location where the survey was undertaken which resulted in the imposition of the comment. UNECE code: http://www.unece.org/cefact/locode/service/location.html
SHIP_COMMENT_Due _Date	N	Date	yyyy- mm-dd	Not Applicable in case of "Memorandum". Normally used for specifying a due date, but may be linked to another survey (see the field below). When both are present it means the first between (SHIP_COMMENT_Due_Date and SHIP_COMMENT_ExpirySurvey).
SHIP_COMMENT_Expi rySurvey	N	Text	500	Not Applicable in case of "Memorandum". SHIP_CERTIFICATE_Code and SHIP_SURVEY_Type.
SHIP_COMMENT_Stat us	N	Text	1	Not Applicable in case of "Memorandum". Normally: A="Active" - the comment is still applicable. P="Postponed" - the comment is still applicable and the due date/expiry survey have been changed. O="Overdue" - the comment is still applicable and is also overdue for implementation.
SHIP_COMMENT_Pos tponed_Due_Date	N	Date	уууу- mm-dd	Not Applicable in case of "Memorandum". Due date after the last postponement.
SHIP_COMMENT_Pos tponed_ExpirySurvey	N	Text	500	Not Applicable in case of "Memorandum". Expiry survey after the last postponement.
SHIP_COMMENT_ISM _CODE	N	Text	5	Applicable only in case of ISM /ISPS /MLC Comments. Chapter/ Paragraph number of the Regulation for ISM /ISPS /MLC.
SHIP_COMMENT_Text	Υ	Text	10000	
ISM_COMPANIES		_		
COMPANY_Managem ent_ID	Υ	Text	20	Ship Management Company ID is the unique identifier assigned by the classification society to identify the ship management company.
COMPANY_IMO_Num ber	N	Text	7	

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COMPANY Name	Υ	Text	20	
COMPANY Address	Y	Text	500	
_	N N	Text	1	Company taken reapensibility on MI COOC
	IN	rext	1	Company takes responsibility on MLC2006
ponsibility				Y/N.
COMPANY CERTIFICATES				
COMPANY CERTIFIC	Υ	Text	20	
ATE_ID				
COMPANY_CERTIFIC	Υ	Text	1	It must be one of the following codes:
ATE_Status				V (Valid), S (Suspended), W (Withdrawn)
COMPANY_CERTIFIC	Ν	Text	3	A company may be issued with a DOC to
ATE_Flag				manage ships of a certain type by one or
				more flag administrations. Flag code
				utilized shall be in accordance with
				ISO3166 with additional qualification where
				required to identify a particular flag state.
COMPANY_CERTIFIC	Υ	Text	20	Name of the organization which issued the
ATE_Issued_By				certificate. If this is the IACS classification
				society, then the code defined in
				SHIP Classed by is used.
COMPANY CERTIFIC	Υ	Text	50	Certificate name must be:
ATE Name				DOC=Document of compliance
_				EEMC=Company energy efficiency
				management certificate
				SRPS=Document of compliance for
				seafarer recruitment and placement service
				Other certificate types may be defined in
				the future.
COMPANY_CERTIFIC	Υ	Text	1	DOC_ type must be one of the following:
ATE_Type				V=Voluntary
				C=Convention
COMPANY_CERTIFIC	Υ	Text	1	DOC_status must be one of the following:
ATE_Validity_Type				F=Full
				I=Interim
				S=Short-term
<u> </u>	Υ	Date	уууу-	
ATE_Issue_Date			mm-dd	
_	Υ	Date	уууу-	
ATE_Expiry_Date			mm-dd	
<u> </u>	N	Text	30	This is a list of ship types, separated by
ATE_Ship_Types				commas.
				The possible values are:
				BC=Bulk carrier
				CH=Cargo high speed craft
				CT=Chemical tanker
				GC=Gas carrier
				MO=Mobile offshore drilling unit
				OT=Oil tanker
				OC=Other cargo ship
				PH=Passenger high speed craft
				PS=Passenger ship
				PR=Passenger ferry (ro-ro)

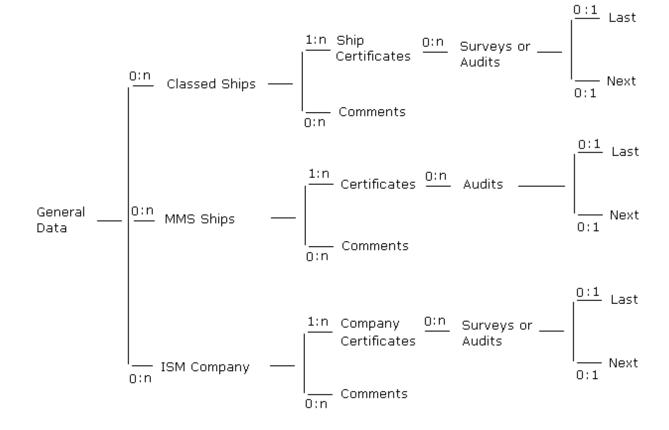
- 2.2.3 The "SHIPS" fields contain the information that is needed to describe a ship.
- 2.2.4 The "SHIP_Flag" fields contain the information in accordance with ISO 3166-1 alpha-3. However, if any Flag State have several flags the specific abbreviations are to be mentioned in the present Recommendation accompanied with the relevant comments.
- 2.2.5 The "SHIP_CERTIFICATES" fields contain information about the classification certificates that have been issued for the ship by the Society and the statutory certificates that have been issued on behalf of the flag state; one ship may have many certificates.
- 2.2.6 The "SHIP_SURVEYS" fields contain the information that is needed to identify surveys/audits carried out on ships/companies; one certificate may have many surveys/audits.
- 2.2.7 The "SHIP_COMMENTS" fields contain pertinent information about the ship that is of interest to a Societies surveyor or flag administration; one ship may have many comments.
- 2.2.8 The "COMPANY" fields contain the information that is needed to describe a Ship Management Company.
- 2.2.9 Important note: Data could contain a record for a company without containing a record for a ship, e.g. where ship is classed by a different society and also ISM SMC certificate is issued by a different society.
- 2.2.10 The "COMPANY_CERTIFICATES" fields contain information about the certificates issued to the ship management company; a company may have many certificates.
- 2.2.11 If the location (http://www.unece.org/cefact/locode/service/location.html) is not suitable for any reason this field may contain any appropriate free text.

2.3 Data collection and processing

- 2.3.1 All data is to be placed in the XML file(s) for UDEF transmission.
- 2.3.2 At least two main types of data are to be formed depending on requests:
- Data table (Tier 1, this is to start testing of UDEF and to work out further development of the harmonized UDEF for the Tier 2);
- Data string (Tier 2).
- 2.3.3 Data table is primarily intended to facilitate data supply from each RO to Flag administration and provides general information about a number of vessels (all vessels) flying the Flag and requests no aggregation of data between ROs. It may start with at least only one RO and one Flag state involved.
- 2.3.4 The following diagram shows the relations between the different tables and anticipates a view of the possible data organization in the XML File.

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2.3.5 The description of the tables is described in the Table 2.

Table 2.

Table name	Description
GENERAL_DATA	Root of the datafile containing general information about the RO in charge of the data.
CLASSED_SHIPS	General data of the Classed Ships.
MMS_SHIPS	General data of ships, not classed by the RO, for which the RO manages at least one certification between ISM SMC, ISPS and MLC.
ISM_COMPANIES	General data of companies for which the RO manages the ISM DOC certification.
SHIP_CERTIFICATES	Data of the certificates/documents issued by the RO for a ship and not yet withdrawn or withdrawn in the last month.
COMPANY_CERTIFICATES	Data of the company's certificates issued by the RO for a company and not yet withdrawn or withdrawn in the last month.
SURVEYS / AUDITS	Type of surveys or type of audits for each certificate.
LAST	Data of the last survey carried out on ships for each type of survey in the current certification period, if it exists.
NEXT	Data of the next surveys due for each type of survey, if already scheduled.
COMMENTS	Data of "Condition of Class", "Statutory Recommendation" and "Memorandum".

2.3.6 Data string is intended to supply the end user with complete data about the ship(s). The data is collected from all available sources (e.g.: Class=RO1, Statutory=RO2, ISM=RO3, MLC=RO4, e.t.c.). This may be realized effectively when the UDEF starts at least among all (or majority) of IACS members.

2.4 Special restrictions and comments

- 2.4.1 Some data (like SHIP_Class_Notation, SHIP_Gross_Tons, SHIP_Deadweight) aggregated from different ROs may vary and should be provided by the RO were the ship is originally classed (NOT ISM, MLC e.t.c) to avoid complaints.
- 2.4.2 The same data shall not be repeated in the same XML file to avoid its increasing (e.g. data relevant to ISM Companies (certificates and audits) should be extracted in the XML file only once).

3. Format of Reports for Printed Exchange and Online Viewing

3.1 Introduction

- 3.1.1 Three report layouts are typically to be used by class societies when reporting to flag states.
- 3.1.2 The following reports for web access have been defined:
- Periodical List of Certificates Issued (optionally for a particular period);
- Periodical Report of Ship Management Company Audits;
- Ship Survey Status Report.

- 3.1.3 Text printed italics show the field from which the data originates.
- 3.1.4 For the cases if reports are printed for/by the flag states A4 landscape format looks preferable. The layout of titles and data items should be preserved.
- 3.1.5 On requests by web services all data requested should be placed in the XML file in accordance with XML file manner by the server software of the IACS Member and returned to Flag State.
- 3.1.6 Flag states may use any compatible software for XML processing and making reports in accordance with their own requirements.

3.2 Periodical List of Certificates Issued

- 3.2.1 The purpose of this report is to list the statutory certificates issued and surveys that have been carried out by a society on vessels that are sailing under a particular flag state.
- 3.2.2 The report shall have the following layout:

Page I	leader:								
Periodical List of Certificates Issued Period:									
Vesse	l Header								
IMO N	0:		Class	No:		Vessel	Name:		
Data:									
Certificate Survey									
Code	Type	Description	Expiry	ID	Туре	Description	Date	Place	
Code	Туре	Description	Expiry	ID	Туре	Description	Date	Place	
Code	Type	Description	Expiry	ID	Type	Description	Date	Place	
Page F	ooter:	•		•				•	
Page 2	of XX								
Report Footer:									
IACS S	Standard	dized Report o	f Ship Su	rveys					
		Report Date; I	-	-	XXXX				

- 3.2.3 Users may obtain the information in this report in three ways:
- download the data for all ships in a period;
- view online to find the information relating to a particular vessel in a period;
- view online for all ships in a period for printing.
- 3.2.4 This report shall not include any data for CLASS surveys, i.e. SHIP_CERTIFICATE_Code <> "CLASS"
- 3.2.5 The Page Header shall show the title of the report and the period that the data it presents relates to.

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3.2.6 For each vessel in the report the following information is provided.

IMO Number = SHIP_IMO_Number

(cont)

Class Number=SHIP_Class_Number

Vessel Name=SHIP_Name

- 3.2.7 For browsing/printing each vessel should start on a new page.
- 3.2.8 For each vessel shown the following data should be presented:

Code=SHIP_CERTIFICATE_Code

Type=SHIP_CERTIFICATE_Type

Description=SHIP_CERTIFICATE_Description

Expiry=SHIP_CERTIFICATE_Expiry_Date

ID=SHIP_CERTIFICATE_ID

3.2.9 For each certificate the list of surveys carried out should be presented:

Type=SHIP_SURVEY_Type

Date=SHIP_SURVEY_Held_Date

Place=SHIP SURVEY Place Held

- 3.2.10 Each page should display the date the report is printed and the current number page of the report.
- 3.2.11 The report shall have a footer which lists any abbreviations used in the report. These shall be in line with the codes described previously in this document.
- 3.2.12 Additionally the report should state "IACS Standardized Report of Ship Surveys Report Name, Report Date, Report version..." at the end.

3.3 Periodical Report of Ship Management Company Audits

3.3.1 The purpose of this report is to list any audits of Ship Management Companies that have been carried out by the reporting classification society.

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Page He	eader:								
Periodio	cal Report	t of Ship Ma	nagement	Company	Audits	Period	l:		
Compan	y Header:								
Compar	ny Name:				Ad	dress:			
Data:									
Certifica	ate					Audit			
Name	Type	Status	Issued	Expiry	Ship Types	Туре	Date		
Name	Туре	Status	Issued	Expiry	Ship Types	Туре	Date		
Name	Туре	Status	Issued	Expiry	Ship Types	Туре	Date		
Page Fo	Page Footer:								
Page X of XX									
Report Footer:									
IACS St	IACS Standardized Report of Company Audit								
Report	Nama: Ra	nort Date: R	enort ver	sion: XXXX	(

- 3.3.2 Users may obtain the information in this report in three ways:
- download the data for all companies in a period;
- view online to find the information relating to a particular company in a period;
- view online for all companies in a period for printing.
- 3.3.3 The Page Header shall show the title of the report and the period that the data it presents relates to.
- 3.3.4 For each company the following information shall be presented:

Company Name=COMPANY_Name

Address=COMPANY_Address

- 3.3.5 For printing each company should start on a new page.
- 3.3.6 For each company details of its current certificates should be displayed:

Name= COMPANY_CERTIFICATE_Name

Type=COMPANY_CERTIFICATE_DOC_Type

Status= COMPANY_CERTIFICATE_DOC_Status

Date=COMPANY_CERTIFICATE_Issue_Date

Expiry=COMPANY_CERTIFICATE_Expiry_Date

Ship Types=COMPANY_CERTIFICATE_Ship_Types_Approved

- 3.3.7 Each page should display the date the report is printed and the current number page of the report.
- 3.3.8 The report shall have a footer which lists any abbreviations used in the report. These shall be in line with the codes described previously in this document.

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3.3.9 Additionally the report should state "IACS Standardized Report of Company Audit Report Name, Report Date, Report version..." at the end.

3.4 Ship Survey Status Report

3.4.1 The purpose of this report is to provide a flag state with a concise report of the current survey and certificate status of a vessel. It lists when all surveys are next due.

Page He	eader:											
Ship Su			Report									
Vessel H	leader:											
Vessel Name: IMO N) :		Flag:			Por	Port of Registry:		
Classec		Class	Class Notation:			Gross Tons:			Official Number:			
Class No:			Ship T	Ship Type			Deadweight:			Call Sign:		
Data:												
Certifica	ate											
Code	Code Typ		/ре	е		Description		Expiry		ID		
Code	Code Typ		/ре	е		Description		Expiry		ID		
			i									
Code Typ			/pe	е		Description		Expiry		ID		
Survey	,							1			1	
Code	Type		Descriptio	escription Da		Place	Due Date		Date1	Date2	Status	
Code	Туре		Descriptio	n D	ate	Place	Due Date		Date1	Date2	Status	
Code	Type C		Descriptio	escription Da		Place	Due Date		Date1	Date2	Status	
Comme	nts			•							•	
Туре		Date	Date)	Due Dat	е	Status		Text		
Туре		Date		Place		Due Dat	е	Status		Text		
<i>J</i>		Date	Date)	Due Date		Status		Text		
Page Fo												
Page X												
Report F												
IACS Standardized Report of Ship Survey Status Report Name; Report Date; Report version: XXXX												

- 3.4.2 Users can obtain the information in this report in the following ways:
- View online to find the information relating to a particular vessel.
- 3.4.3 The Page Header shall show the title of the report.
- 3.4.4 For the vessel displayed the following information shall be presented:

Vessel Name=SHIP_Name

IMO No=SHIP_IMO_Number

Flag=SHIP_Flag

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Port of Registry=SHIP_Port_Of_Registry

Classed by=SHIP_Classed_By

(cont)

Class Notation=SHIP_Class_Notation

Gross Tons=SHIP_Gross_Tons

Official Number=SHIP_Official_Number

Class No=SHIP_Class_Number

Ship Type=SHIP_General_ Type_Description

Deadweight=SHIP_Deadweight

Call Sign: SHIP_Call_Sign

Code=SHIP_CERTIFICATE_Code

Type=SHIP_CERTIFICATE_Type

Description=SHIP_CERTIFICATE_Description

Expiry=SHIP_CERTIFICATE_Expiry_Date

ID=SHIP_CERTIFICATE_ID

Code=SHIP_SURVEY_Code

Type=SHIP_SURVEY_Type

Description=SHIP_SURVEY_Description

Last Survey Date=SHIP_SURVEY_Held_Date

Place Held=SHIP_SURVEY_Place_Held

Due Date=SHIP_SURVEY_Due_Date

Date1=SHIP_SURVEY_Range_From_Date

Date2=SHIP_SURVEY_Range_To_Date

Status=SHIP_SURVEY_Status

Comment Type=SHIP_COMMENT_Type

Date Issued=SHIP_COMMENT_ Date_Issued

Place Issued=SHIP_COMMENT_ Place_Issued

Due Date=SHIP_COMMENT_Comment_Due_Date

Status=SHIP_COMMENT_Status

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Text=SHIP_COMMENT_Text

- 3.4.5 Each page should display the date the report is printed and the current number page of the report.
- 3.4.6 The report shall have a footer which lists any abbreviations used in the report. These shall be in line with the codes described previously in this document.
- 3.4.7 Additionally the report should state "IACS Standardized Report of Ship Survey Stats, Report Name, Report Date, Report version..." at the end.

4. Recommended protocols and other exchange issues

4.1 Introduction

- 4.1.1 Finding the optimal protocol of exchange and related matters is a significant part of the data exchange process. Making proper grounds for UDEF the following recommended protocol and method looks favourable and recommended:
- Recommended protocol: Web Service/REST;
- Recommended method: PULL an XML file validated by common XSD.

End of Document

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