

THETIS: Data Provision by Flag Administrations and ROs

Future Steps

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Unit B.3 - Environment and Capacity Building / Ship Inspection Support

ROs: How do they currently provide data?

“Class Information Services” Web-service (2018)

- Data is communicated by ROs on a daily basis of all classed ships,
- All EU ROs and one non-EU RO (TL) are providing data to THETIS,
- Data on **class certificates**, **class conditions** and **statutory certificates (voluntary)**.



Deep-Hyperlink to ROs websites for further information: survey plans, dimensions, particulars, management details, hull notation

Class Certificates	
	Source
Actions ▾	BV
Actions ▾	LR
Actions ▾	PSCO
Add class certificate	
Links	
Lloyd's Register	
Bureau Veritas	

What ROs provide today

Class Certificate details

Issuing Authority: EU-RO
Modification Date: 03/01/2019 15:00

Ship Particulars: IMO, Keel laying date, Name, Flag, Gross Tonnage, Class' Ship Type

Ships Certificates Condition

IMO Number: 1234567 Name: Queen Ship Gross Tonnage: 24206
Keel Laying Date: 17/4/2000 Flag: Bahamas Class Ship Type: Ro-Ro passenger ship

Company Type	Number	Name	Performance	EU Recognized*
Owner	1234567	Queen Owner Cmp		
Manager	8910111	Queen Owner Mgmt		
ISM	1213141	Queen Owner ISM		

Company Particulars:
Company Type, IMO Number, Name

*Values fetched from THETIS. Not provided by RO

Close

What ROs provide today

Ships Certificates Condition			
Conditions Details: Description, Issue Date and Due Date			
Type	Description	Issue Date	Due Date
Condition	SPRINCKLER NOZZLES TO BE RENEWED AS NECESSARY. DUE DATE 30 April 2016.	11/4/2016	30/4/2016
Condition	FLAME ARRESTORS ON CAR DE... VENT CASING TO BE REPAIRED AS NECESSARY. DUE DATE 25 SEPTEMBER 2016.	11/4/2016	30/9/2016
Condition	HYDRAULIC UNIT FOR 2nd MEANS TO START E.GENERATOR TO BE DEALT WITH AS NECESSARY BEFORE DEPARTURE.	11/4/2016	31/5/2016

Recommendations /Conditions of Class

What ROs provide today

Class Certificate details

Issuing Authority: EU-RO

Status: In class

Modification Date: 03/01/2019 15:06

Status Date: 01/06/2016

Ships

Certificates

Condition

Certificate details: Survey Date, Next Survey, Issue Date, Expiry Date, Status, Status Reason, Status Date

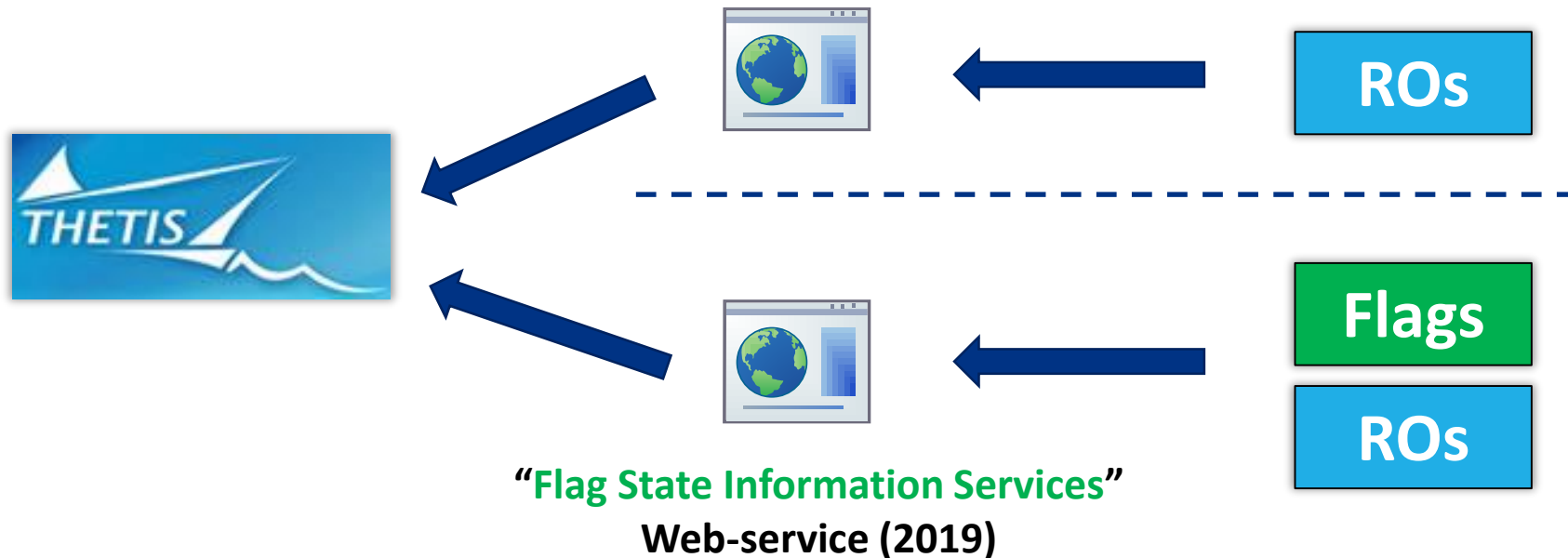
Type	Certificate	Term	Survey Date	Next Survey	Issue Date	Expiry Date	Status	Status Reason	Status Date
CLASS	CLASS	Fullterm	6/10/2018	12/12/2019	5/10/2018	11/12/...	In class	Not applica...	1/6/20...
STATUTORY	Interim International Ship Security Certificate		23/11/2018	7/9/2018	30/8/2018	27/2/2...			
STATUTORY	Interim International Ship Security Certificate		23/11/2018	23/11/2018	5/10/2018	4/4/20...			

Information on both "Class" and "Statutory Certificates"

A new web-service: Flag Administrations and ROs

- **Additional statutory certificate data:** as found in the annexes
- **E-Certificate:** Unique Tracking Number

“Class Information Services +” Web-service (2019)



- **Additional statutory certificate data:** as found in the annexes
- **Additional survey dates:** annual, renewal, intermediate and periodical surveys
- **Additional ship particulars:** call sign, port and date of registry, registry number, etc
- **E-Certificate:** Unique Tracking Number
- **Code standardisation:** IACS submission MSC95/INF.13

Statutory Certificates: Further Data Elements - Examples

Cargo Ship Safety Equipment Certificate



RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA , 1974, AS AMENDED (FORM E)

1. Particulars of ship

Name of Ship : TEST

REGISTER : TEST

Distinctive number or letters: TEST TEST

2. Details of life-saving appliances

1	Total number of persons for which life-saving appliances are provided	Possible new data elements	
2	Total number of davit launched lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of self-righting partially enclosed lifeboats (regulation III/43) ¹		
2.3	Number of totally enclosed lifeboats (regulation III/31 and LSA Code section 4.6)		
2.4	Number of lifeboats with a self contained air support system (regulation III/31 and LSA Code section 4.7)		
2.5	Number of fire-protected lifeboats (regulation III/31 and LSA Code section 4.9)		
2.6	Other lifeboats		
2.6.1	Number		

Statutory Certificates: Further Data Elements - Examples

Certificate of Fitness for the Carriage of Liquefied Gases in Bulk



THIS IS TO CERTIFY

1. That the above mentioned ship is a ship defined in 1.2.2(a) of the Code. :
2. (i) that the ship has been surveyed in accordance with the provisions of section 1.6 of the Code.

(ii) that the survey showed that the structure, equipment, fittings, arrangements and materials of the ship and the conditions thereof are in all respects satisfactory and that the ship complies with the relevant provisions of the Code.

3. That the following design criteria have been used :

.1 ambient air temperature °C

.2 ambient water temperature °C

.3



Possible new data elements



Tank type and Number	Materials	MARVS

Statutory Certificates: Further Data Elements - Examples

Dangerous Chemicals in Bulk (ICoF/IBC Code)



4. That the ship meets the requirements for the carriage in bulk of the following products, provided that all relevant operational provisions of the Code and Annex II of MARPOL 73/78 are observed:

Product	Conditions of carriage (tank numbers etc.)	Pollution Category
Possible new data elements		

Statutory Certificates: Further Data Elements – E-Certificate

The date formatting used on this certificate is: dd-mm-yyyy

Updated res. MSC.240(83) + MSC 308(88)

4/4
Tracking No.: .

**E-Certificate: Unique Tracking Number – Necessary to
validate e-certificates in ‘Verification Websites’
Possible direct link from THETIS to Flags / ROs Verification
websites?**

FAL.5/Circ.39/Rev.2
Annex, page 2

- .4 *Printed version of electronic certificate* means a paper printout produced from the electronic certificate;
- .5 *Unique tracking number* means a string of numbers, letters or symbols used as an identifier to distinguish an electronic certificate issued by an Administration or its representative from any other electronic certificate issued by the same Administration or its representative; and
- .6 *Verifying* means a reliable, secure and continuously available process to confirm the authenticity and validity of an electronic certificate using the unique tracking number and other data contained on or embedded in the electronic certificate.

E-Certificates: Verification Websites Deep Hyperlinks?



“Class Information Services +” /
“Flag State Information Services”

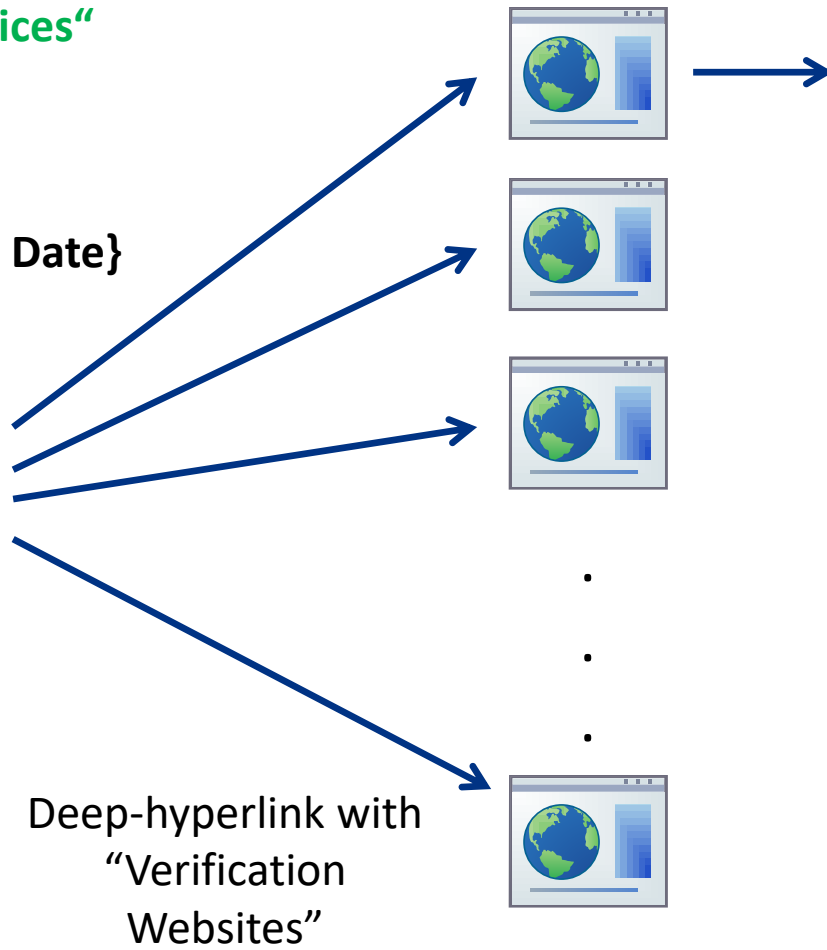
Web-services



{E-Certificate UTN, IMO, Issue Date}



E-Certificate Verification Websites



RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA - 1974, AS AMENDED (FORM E)			
1. Particulars of ship			
Name of Ship	TEXT		
Registration	TEXT		
Distinctive number or letters	TEXT		
2. Details of life-saving appliances			
Total number of persons for which life-saving appliances are provided			
2.1	Total number of deck berthed lifeboats	Part data	Starboard side
2.2	Total number of persons accommodated by them		
2.3	Number of self-righting partially enclosed lifeboats (regulation 10.3.1.2)		
2.4	Number of lifeboats with self-contained air support system (regulation 10.3.1.3 and 10.3.1.4)		
2.5	Other lifeboats		
2.6	Number of lifeboats (regulation 10.3.1.1 and 10.3.1.2)		
2.7	Type		
3	Total number of fixed lifeboats		
3.1	Total number of persons accommodated by them		
3.2	Number of self-righting partially enclosed lifeboats (regulation 10.3.1.2 and 10.3.1.3)		
3.3	Number of lifeboats with self-contained air support system (regulation 10.3.1.3 and 10.3.1.4)		
3.4	Other lifeboats		
4	Number of motor lifeboats (included in the total lifeboats shown in 2 and 3 above)		
4.1	Number of lifeboats fitted with searchlights		
5	Number of rescue boats		
5.1	Number of rescue boats which are included in the total lifeboats shown in 2 and 3 above		
6	Lifeboats		
6.1	Those for which approval life-saving appliances are required		
6.1.1	Number of lifeboats		
6.1.2	Number of persons accommodated by them		
6.2	Those for which approval life-saving appliances are not required		
6.2.1	Number of lifeboats		
6.2.2	Number of persons accommodated by them		
6.3	Number of lifeboats required by regulation 10.3.1.1.4		
Note: In the 1982 amendment to SOLAS (1974), applicable to ships constructed on or after 1 July 1986, the Annex 2, July 1986			

THETIS: Possible Modifications

Statutory Certificates

Source: ☐ THETIS ☒ Flag/RO

	Select	Name	Issuing Authority	Issuing Date	Expiry Date	Surveying Authority
Actions ▾	<input checked="" type="checkbox"/>	Bunker Oil Pollution Emergency Plan	 Cook Islands	20/12/2017	06/12/2018	
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	17/02/2017	26/12/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	05/04/2017	05/10/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	05/04/2017	05/10/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Continuous Synopsis Record [12]	 Tanzania, United Republic of	02/03/2017		
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	27/02/2017	05/10/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	27/02/2017		
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	18/12/2017	08/08/2022	
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	27/02/2017	05/10/2021	
Actions ▾	<input checked="" type="checkbox"/>	International Ship Security	Maritime Lloyd	27/02/2017	05/10/2021	
Actions ▾	<input checked="" type="checkbox"/>	Load Line	Maritime Lloyd	27/02/2017	05/10/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Minimum Safe Manning Document	 Tanzania, United Republic of	16/09/2017	04/10/2018	
Actions ▾	<input checked="" type="checkbox"/>	Safety Management Certificate	Maritime Lloyd	27/02/2017	05/10/2021	Maritime Lloyd
Actions ▾	<input checked="" type="checkbox"/>	Maritime Lloyd	Maritime Lloyd	04/03/2017		
Copy						

Select which certificates to copy to the ship data block.

The only option available is "Actions > Detail" and "Download Certificate" if "unique tracking number" exists and an hyperlink is configured. (when source = Flag/RO).

When pressed confirmation should be presented. To Copy (if all new) and to Copy & Overwrite (if some already exist).

Statutory Certificates: Further Data Elements – For what purpose?



- **Efficiency gains:**
 - Centralising information means less time spent in checking multiple sources,
 - Preparation of inspections prior boarding of ships,
 - Validation of e-certificates prior boarding to ships by establishing (where possible) links to Verification Websites of ROs / Flags
 - Future: having certificate data copied into inspection reports so to reduce administrative burden.
- **Cross-Checking:** checking the information submitted by Flags/ROs against what has been found on board of the ship.
- **Prioritisation / Alerts:** additional data may open up the door for 'intelligent processing' of data towards alerts and improved inspection prioritisation.

New Web-Service for Flag and ROs: Technical Challenges



- **Data Volume:**
 - Preliminary analysis identified that additional statutory data may amount to over **1000** (!) data fields found on statutory certificates forms.
 - Perhaps a sub-selection may be necessary.
- **Data Harmonisation and Standardisation:**
 - Statutory Certificates: each certificate follow its own template and have specific data elements – **how to combine** information in one web-service?
 - **Different coding schemes:** statutory certificate type, ship types, etc. ROs and Flag Administrations may be using different technical codes.
- **Continuous Data Quality Checks:** periodical and random selection of ships' to validate data completeness/if up-to-date against third sources.
- **Technical Specification:** currently EMSA is preparing a technical specification to address the above challenges for the new webservice "Flag State Information Services". We are still at an early stage thus the technical specification can be discussed with Flag Administrations and ROs that are ready to upload the additional data.

- ROs are currently providing a **high volume of data** but of a **limited dataset**.
- The technical implementation of a new service is underway for Flag Administrations as well as ROs with an **expanded dataset (to be ready by end of 2019)**.
- Having more data may bring **efficiency gains** in preparing inspections prior boarding of ships.
- In what concerns e-certificates having the UTN may open up the door to establish links with Flags / ROs **verification websites**.
- **Biggest challenge: having access to the data.**



Thank you for your time! Questions?

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