European Maritime Safety Agency

THETIS MRV

Information System in support of EU Regulation 2015/757 on MRV

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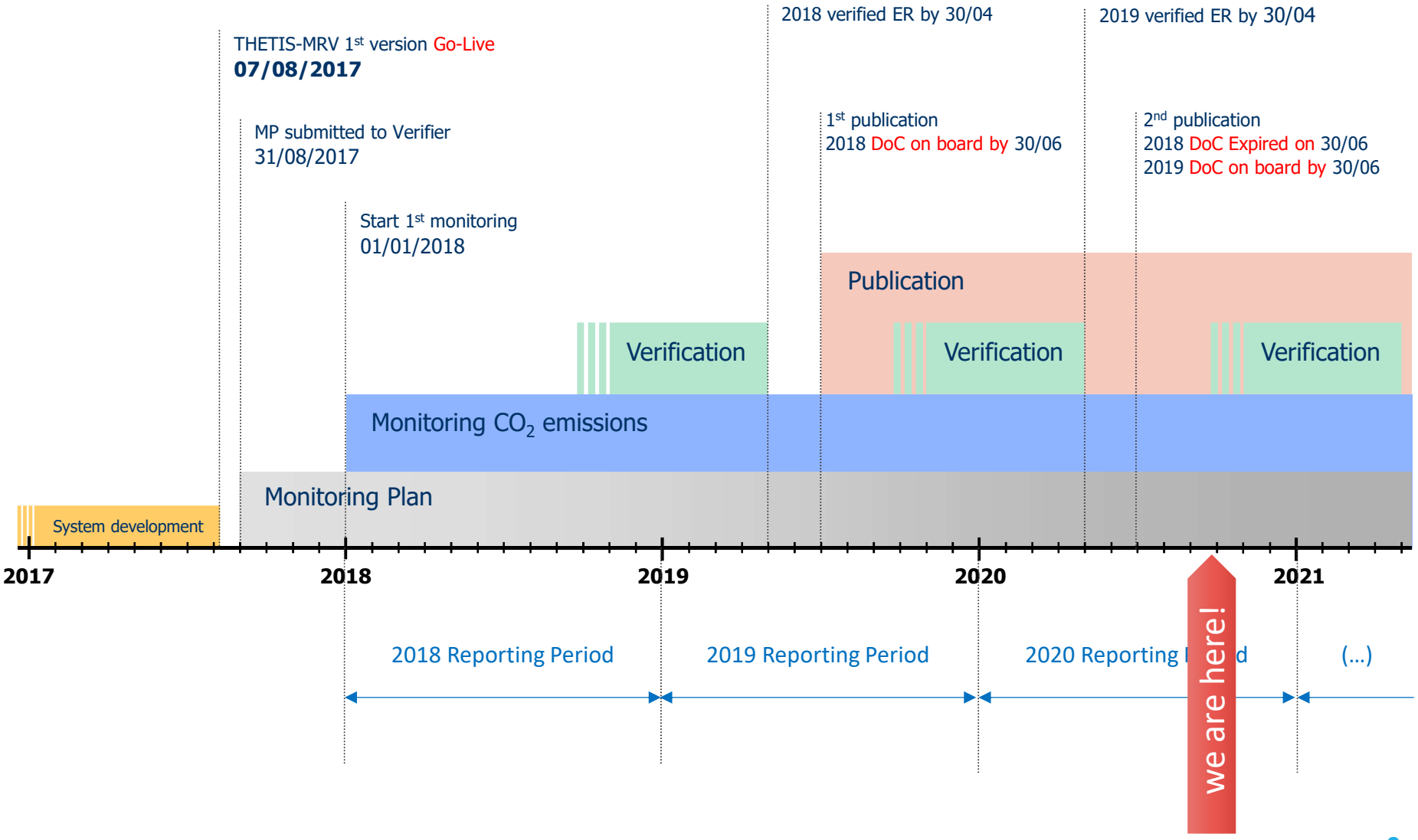
Sustainability & Technical Assistance

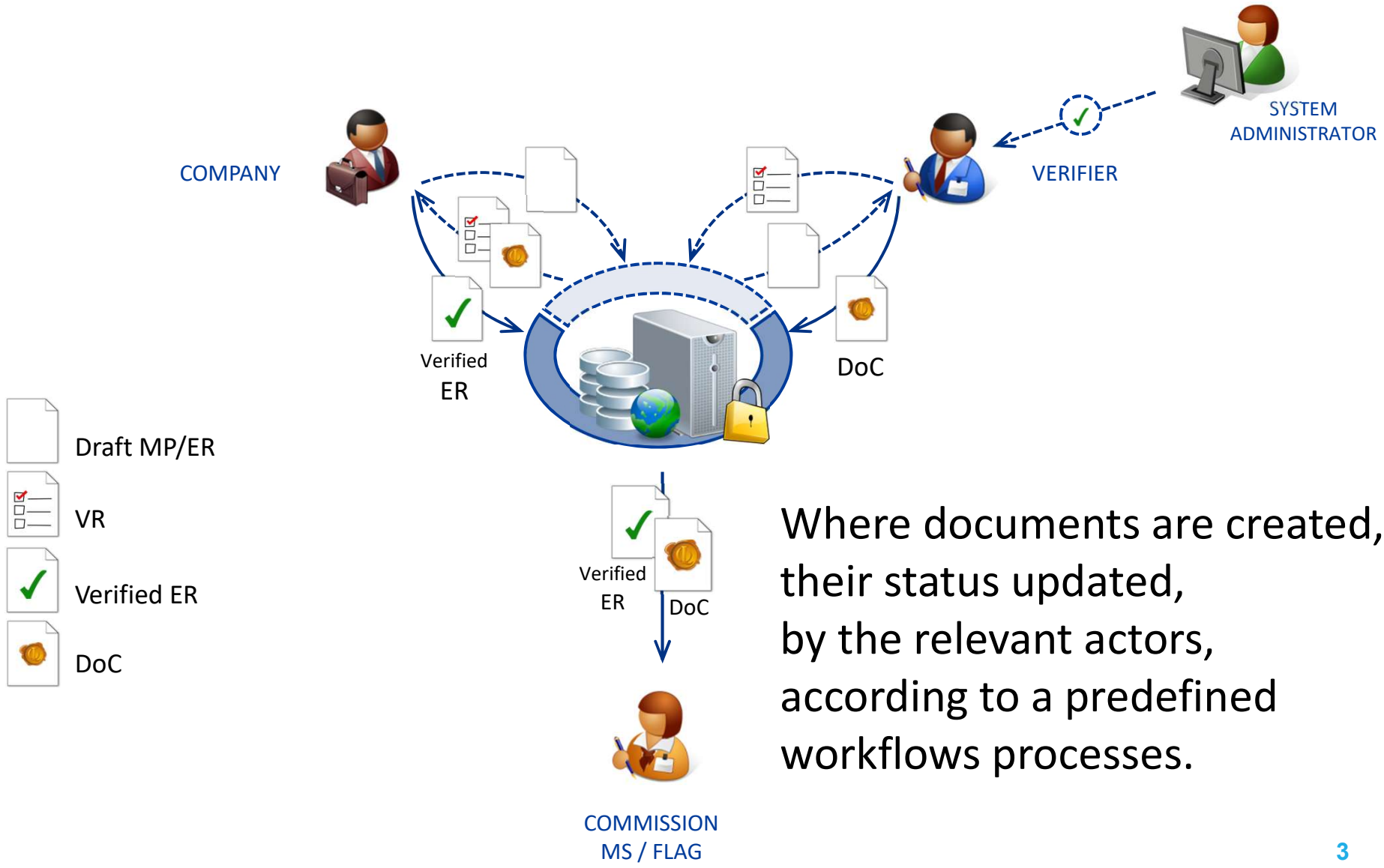
29 September 2020

EMSA

EU MRV Timeline

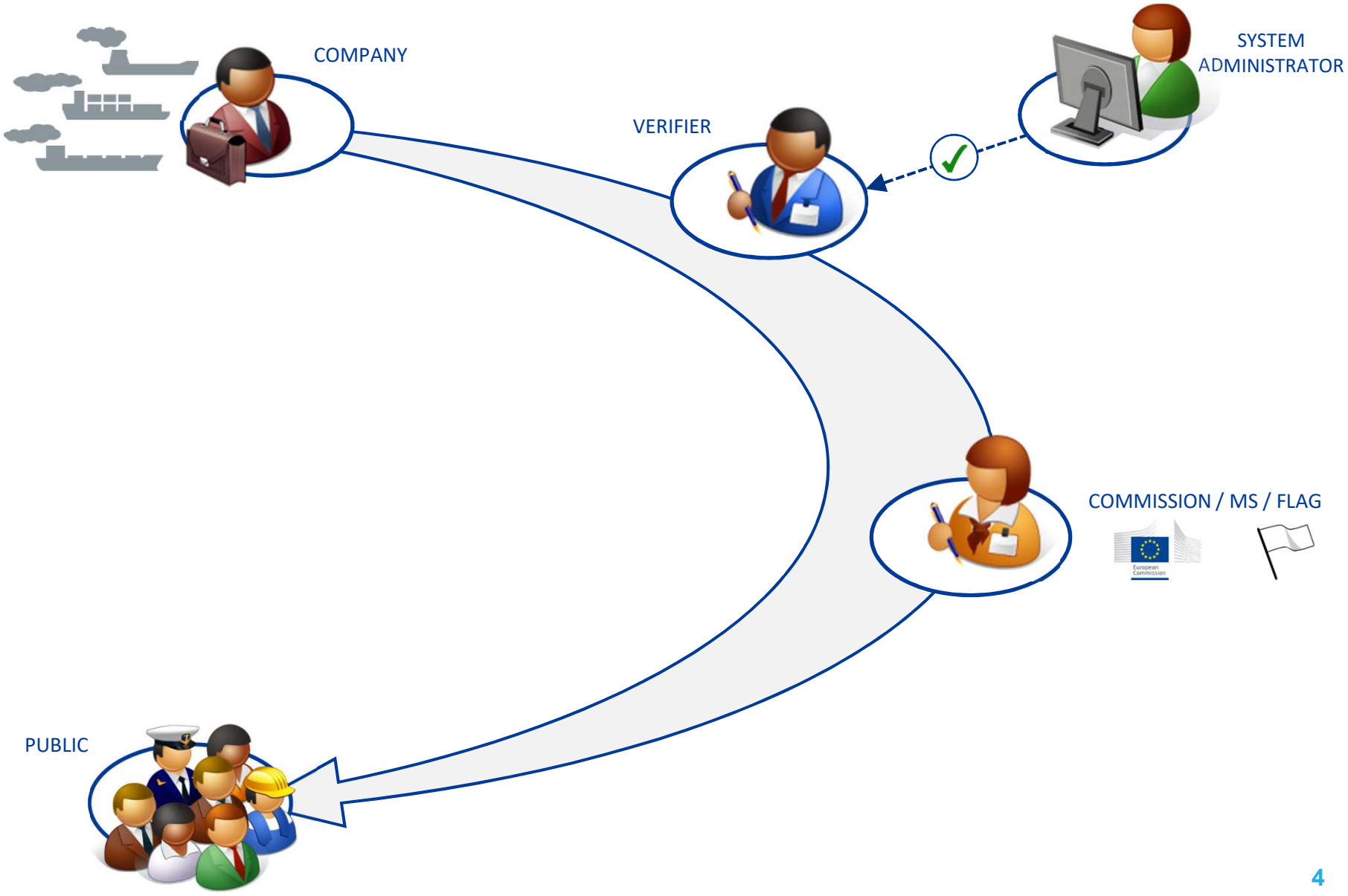


Centralized web based system



Where documents are created, their status updated, by the relevant actors, according to a predefined workflows processes.

Actors

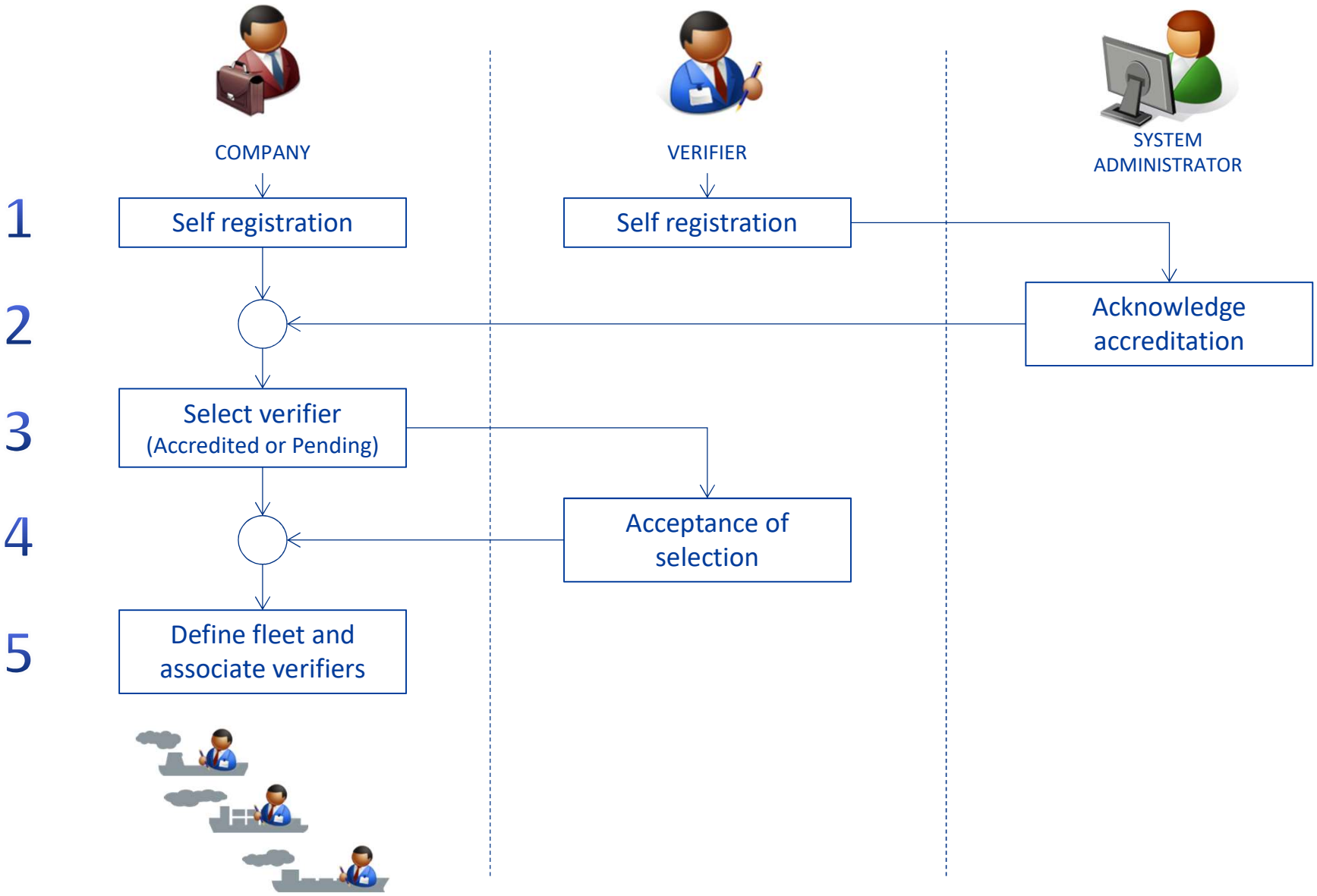

COMPANY
SYSTEM ADMINISTRATOR
VERIFIER
COMMISSION / MS / FLAG
PUBLIC

Figures today

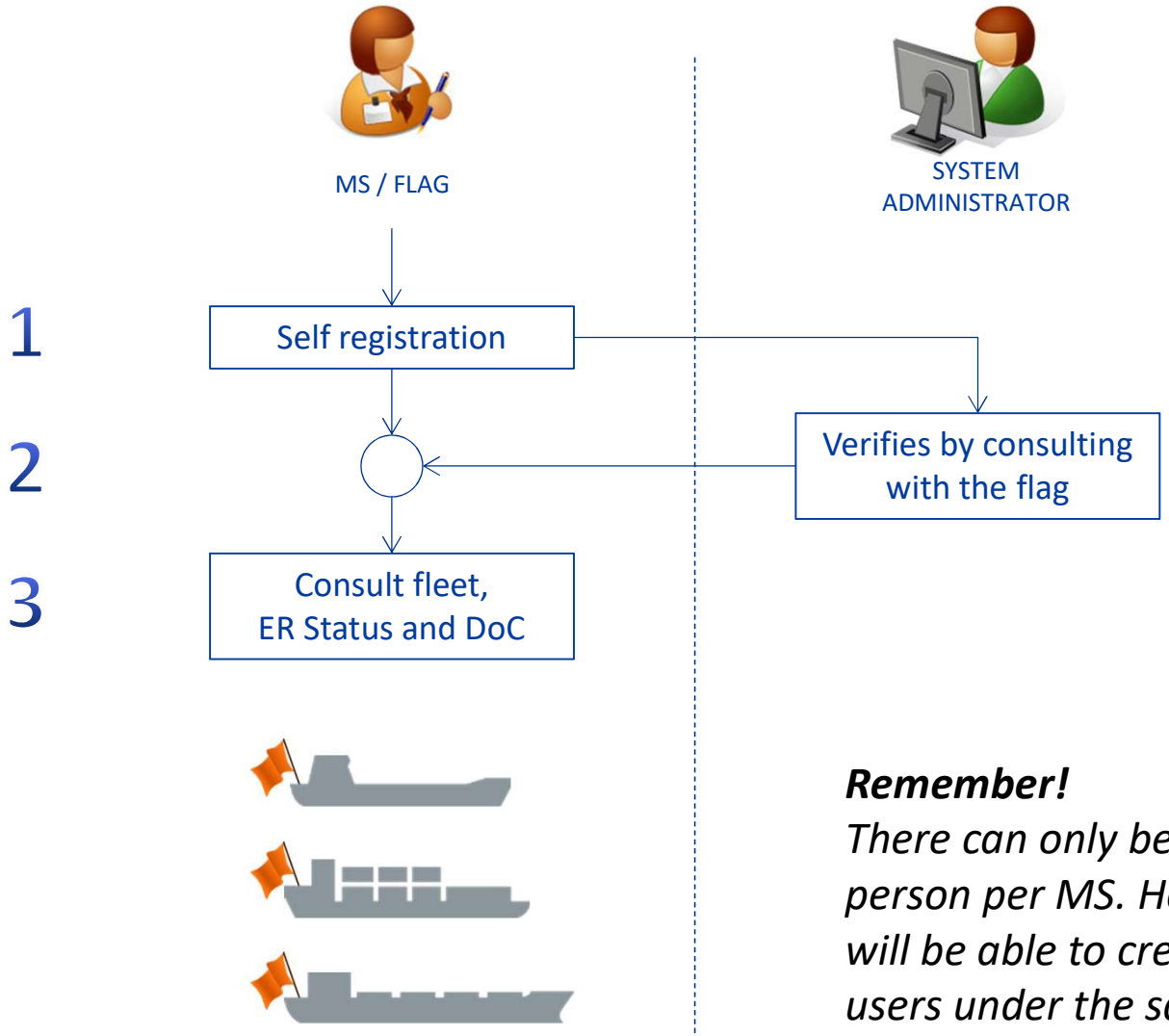
- 18.897 ship
- 3.104 company users from 2.319 companies
- 468 verifiers users from 30 accredited verifiers
- 78 flag state users, from 22 EU MS and 5 Non-EU MS

Information collected on 28/09/2020

Company and Verifier registration process



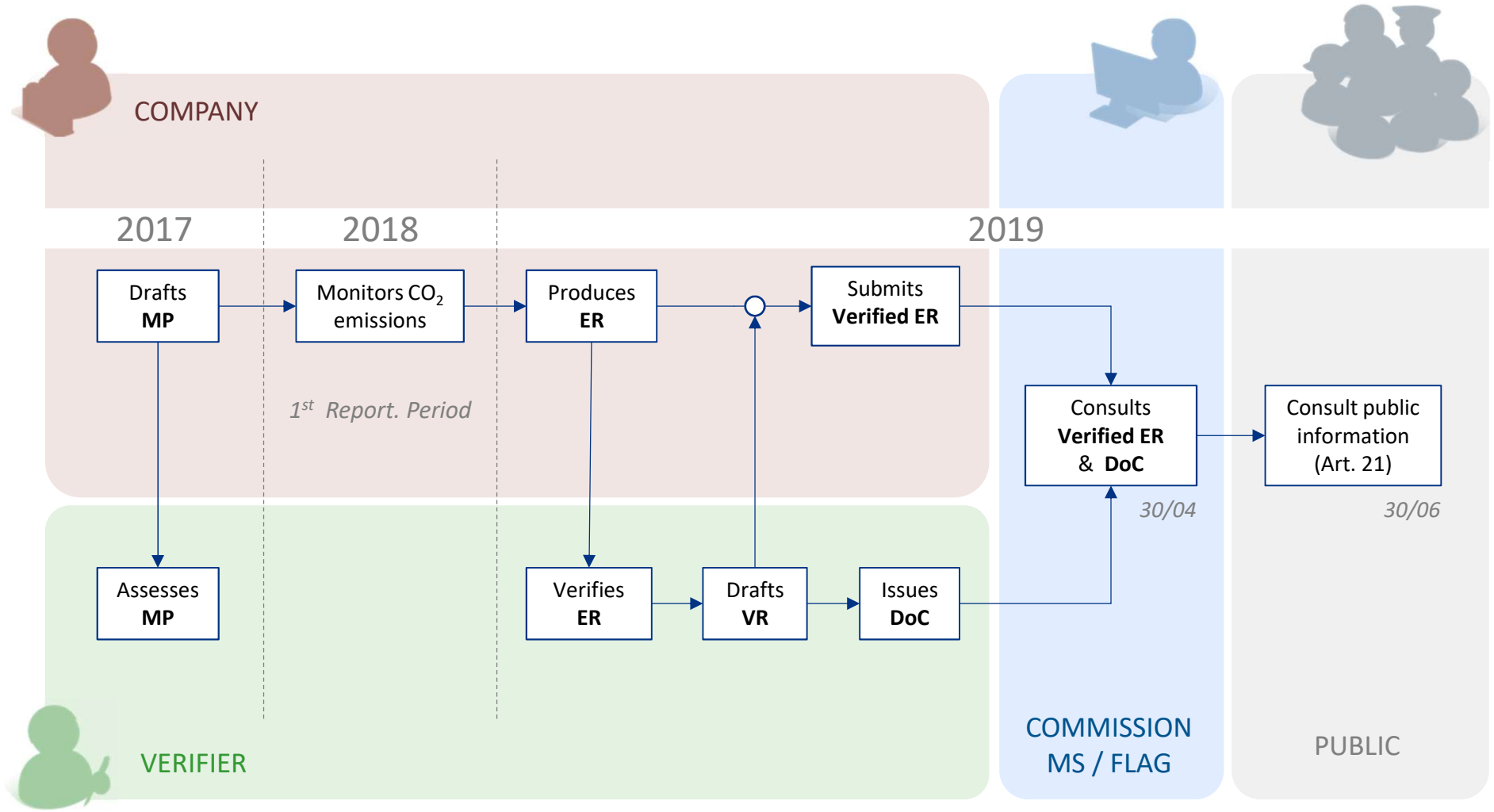
MS / Flag registration process



Remember!

There can only be one responsible person per MS. However, this person will be able to create additional users under the same account.

Workflow


COMPANY
2017
2018
2019
Drafts MP
Monitors CO_2 emissions
Produces ER
Submits Verified ER
1st Report. Period
Consults Verified ER & DoC
30/04
Consult public information (Art. 21)
30/06
Assesses MP
Verifies ER
Drafts VR
Issues DoC
VERIFIER
COMMISSION MS / FLAG
PUBLIC

Figures for 2019 Reporting Period

- 7.895 Drafted Monitoring Plans
- 11.588 Emission Reports Submitted to Commission
- 12.313 Valid Document of Compliance
  - ER Submitted to Commission + Valid DoC 11583
  - ER Submitted to Verifier + Valid DoC 55
  - ER Verified as Satisfactory + Valid DoC 670
  - ER Under Revision + Valide DoC 5

Information collected on 28/09/2020

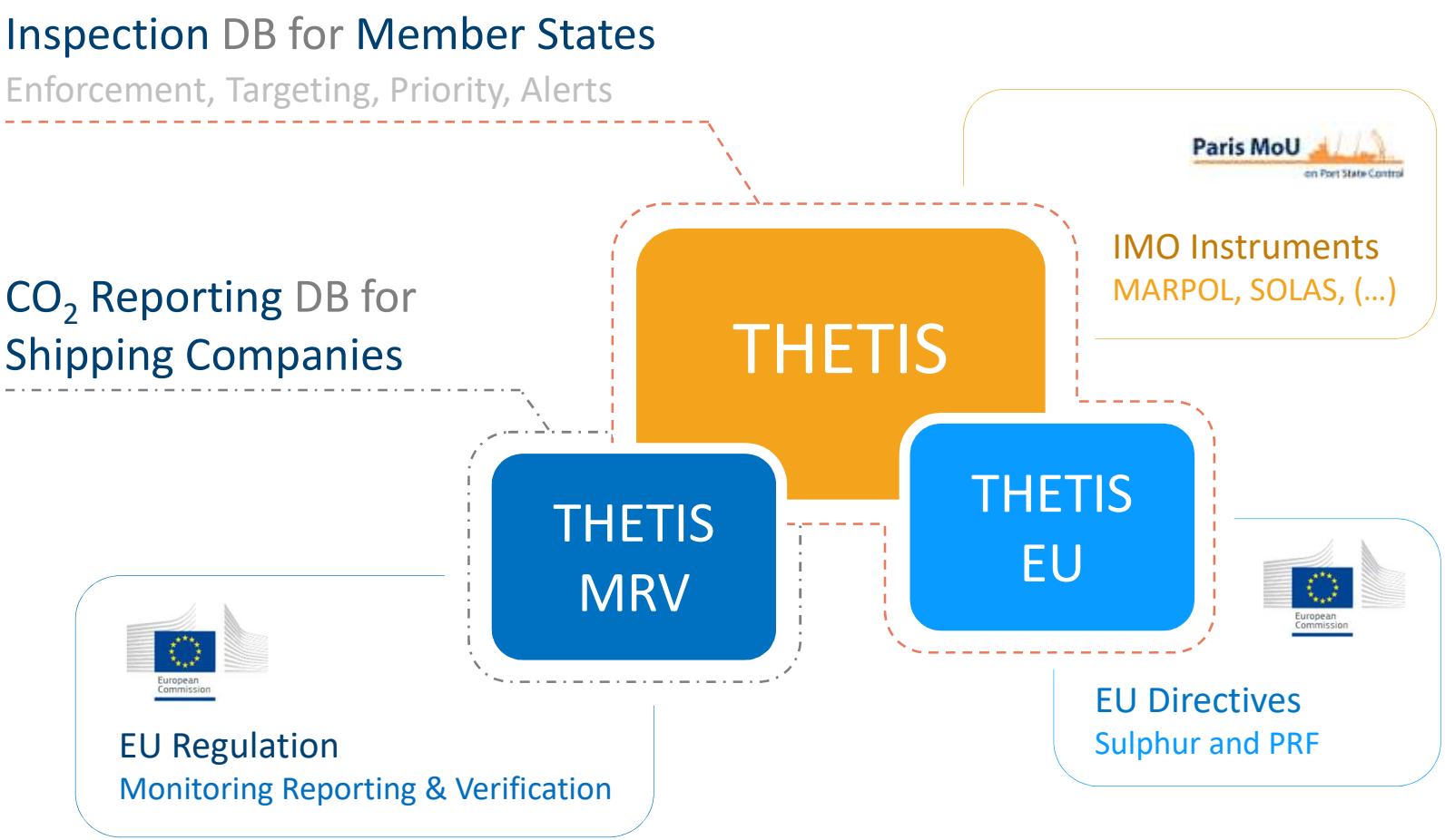
What about enforcement?

THETIS

THETIS-EU

THETIS-MRV

THETIS information system



THETIS

Legal	Directives **2009/16/EC** on PSC and **(EU) 2017/2110** on ro-ro ferries and high-speed passenger crafts
Users	Paris MoU

Features	Includes a **risk based** mechanism for **targeting** ships for inspection resulting from ship details, last inspections and **overriding factors** reported by users, like alleged **pollution incidents**.
Publication	Inspection results with some restrains in content
Figures	18 000 inspections per year are recorded in the system by 600 authorised users

THETIS-EU

Legal	Directives **2016/802** on the reduction in the sulphur content of marine fuels and **2000/59/EC** on port reception facilities
Users	EU Member Sates
Features	Caters provisions not included in the PSC Directive, including **Flag State Control** requirements. Interfaces with THETIS allowing combined inspection with PSC
Publication	Inspection results with some restrains in content
Figures	10 000 inspections per year. 480 Non-compliances (80% inside SECA)

THETIS-MRV

Legal	Regulation **2015/757** on Monitoring, Reporting and Verification of CO_2 from marine transport, Implemented Regulations **2016/1927** and **2016/1928** and Delegated Regulations **2016/2071** and **2016/2072**
Users	Shipping Companies, Verifiers and Flag states Worldwide
Features	Generations of **Monitoring Plans** (Voluntary) an **Emission Reports** (Mandatory) along with management of the workflow between Companies and Verifiers, leading to the issuance of **Documents of Compliance.**

THETIS MRV

EU Regulation
Monitoring Reporting & Verification

Publication	ship specific Emission Reports from 1 July each year.
Figures	12 000 ER per year 2 500 users

Comparison

	THETIS	THETIS-EU	THETIS-MRV
	Enforcement (Processing Inspections)		**Reporting** (Reporting CO_2 Emissions)
	• PSC Inspectors	• PSC Inspectors • Member State Inspectors	• Companies • Verifiers • Member States/Flag States
	• PSC Directive • Ropax Directive • Insurance Directive	• Sulphur Directive • PRF Directive • *(…)*	• MRV Regulation
	• Foreign Flag • International • Calling Paris MoU ports	• All Flags • International/Domestic • Calling EU ports	• All Flags • International/Domestic • Calling EU ports
	System input • Port call information • Priority messages • Targeting **User input** • Ship details • Inspection Findings • Expulsion	**System input** • Port call information • Alerts **User input** • Ship details • Inspection Findings • Alerts	**User input** • Ship details • CO_2 Emission

THETIS MRV “Does” and “Does not”

THETIS - MRV

Does

Record Emissions

Generate ER / DoC

Publishing of information

Does not

Record inspection findings

Record penalties and expulsion orders

Exchange information among MS

MS in THETIS MRV "Can" and "Cannot"

Member States in THETIS MRV

Can

- Restricted Area
  - Consult ER & DoC status and verified ER & DoC of their ships
- Public Area
  - Consult verified ER & DoC for all ships

Cannot

- Consult ships not reported by Companies
- Consult Port Call information

Member State Questions (Art. 19 & 20)

Q1: How do I ensure my ships are in compliance?

Q2: How do I ensure ships calling my ports are in compliance?

Q3: How can I record follow-up actions e.g. penalties and expulsion orders?

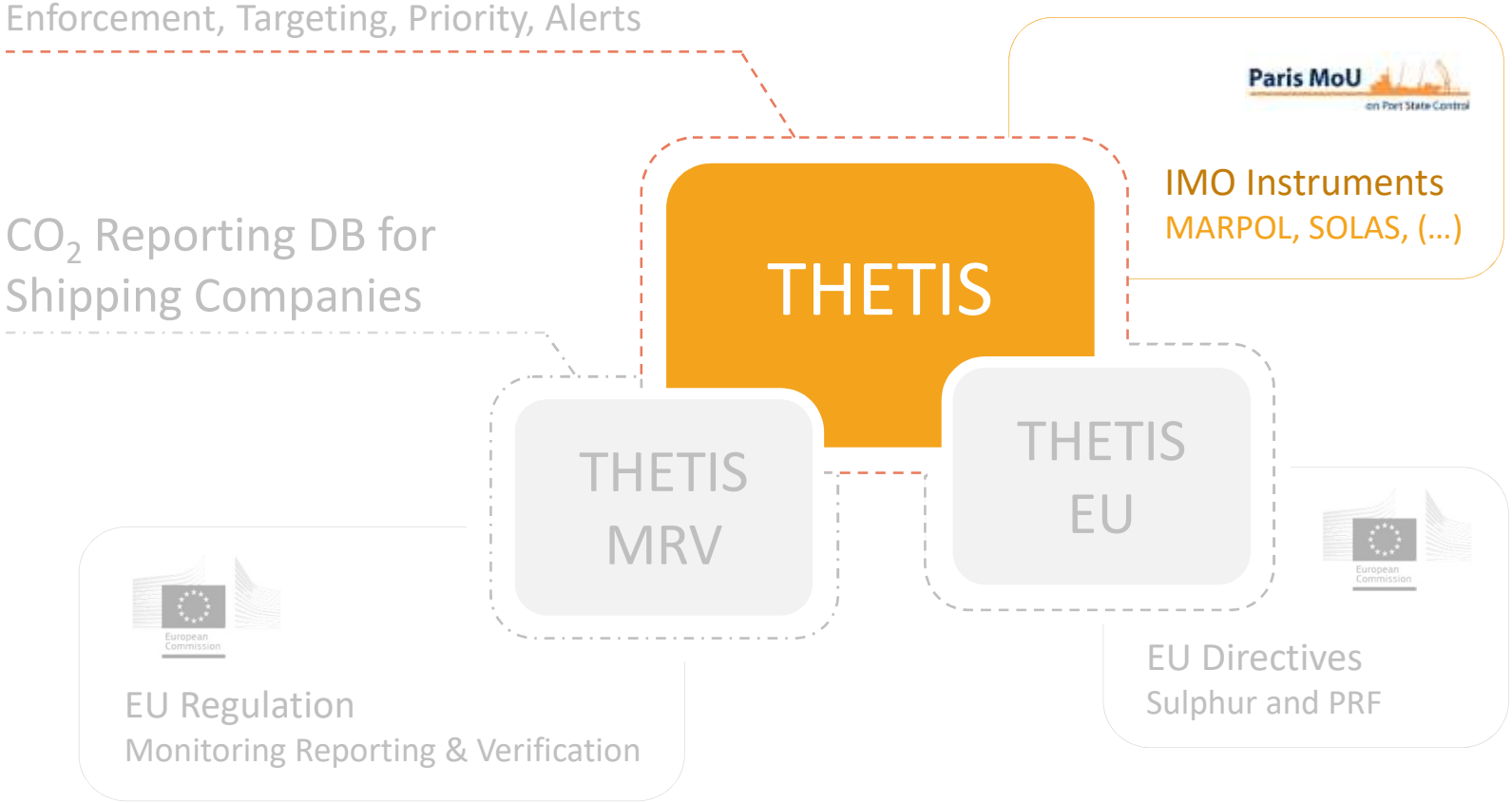
Q4: How will this information be exchanged within my National Authorities?

Q5: How will this information be shared with Commission, EMSA and other MS/Flag concerned?

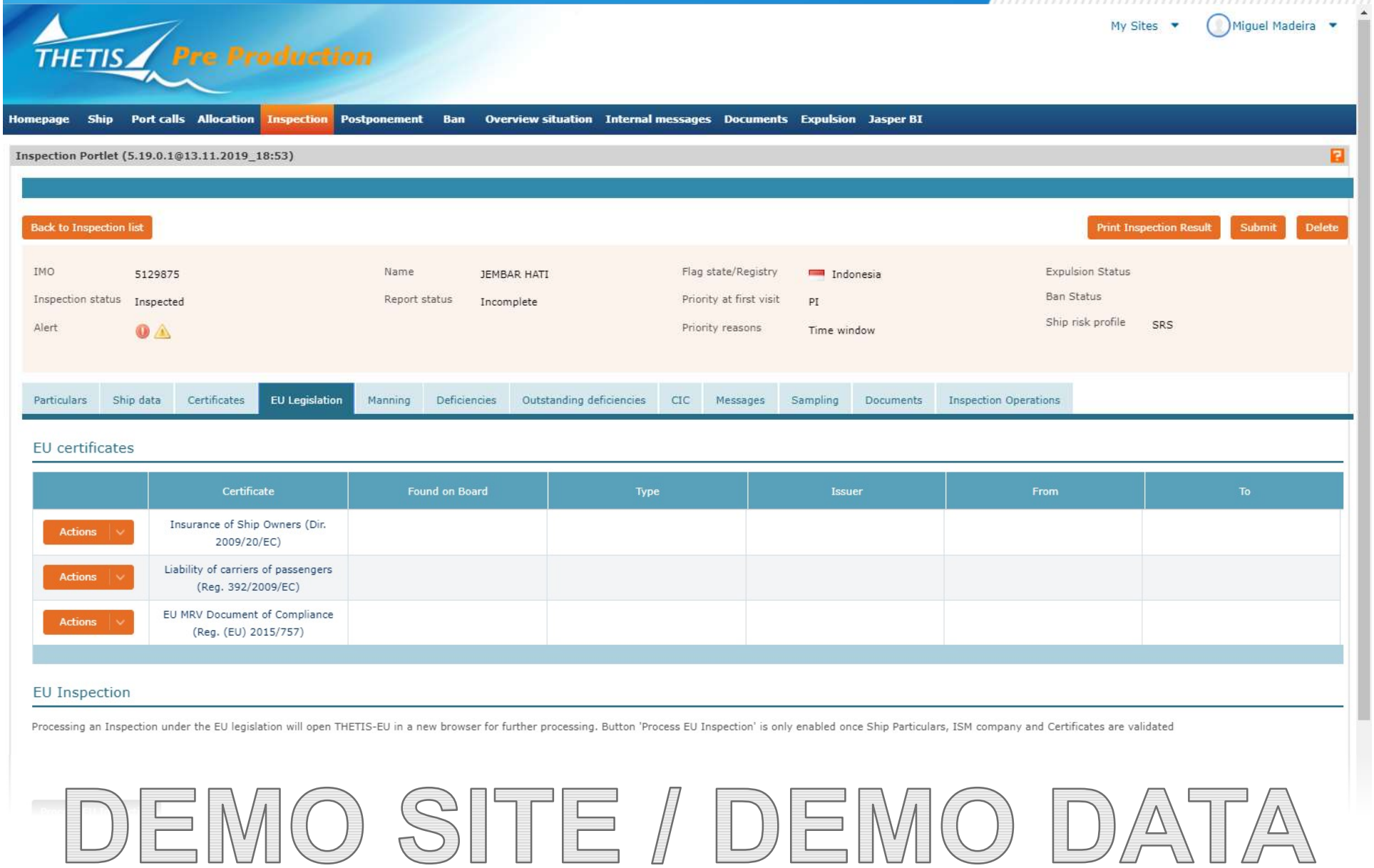
Enforcement by PSC

Article 19.2

THETIS

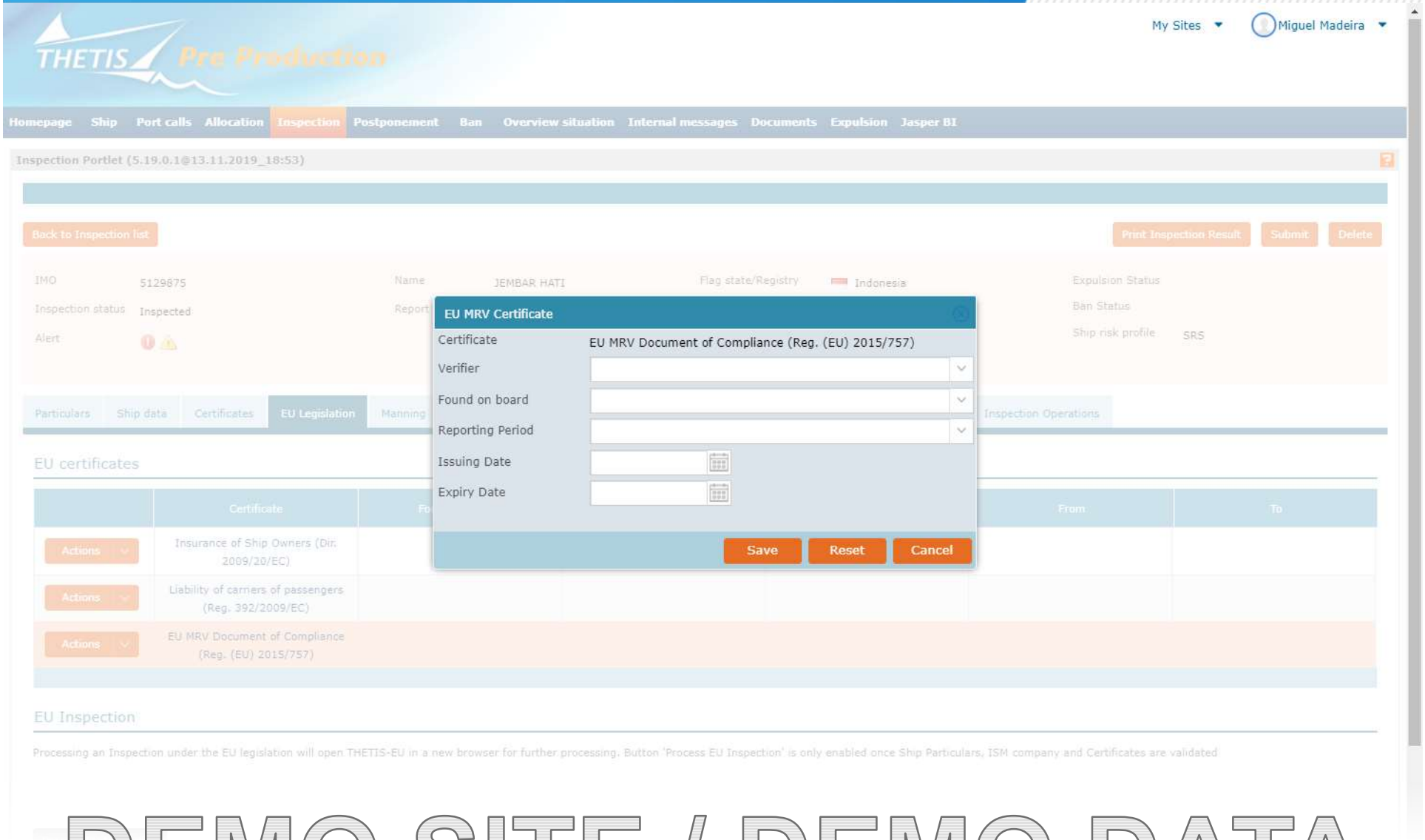

Inspection DB for Member States
Enforcement, Targeting, Priority, Alerts
CO_2 Reporting DB for Shipping Companies
THETIS
THETIS MRV
THETIS EU
Paris MoU on Port State Control
IMO Instruments
MARPOL, SOLAS, (…)
EU Regulation
Monitoring Reporting & Verification
EU Directives
Sulphur and PRF

EU Legislation on a PSC inspection



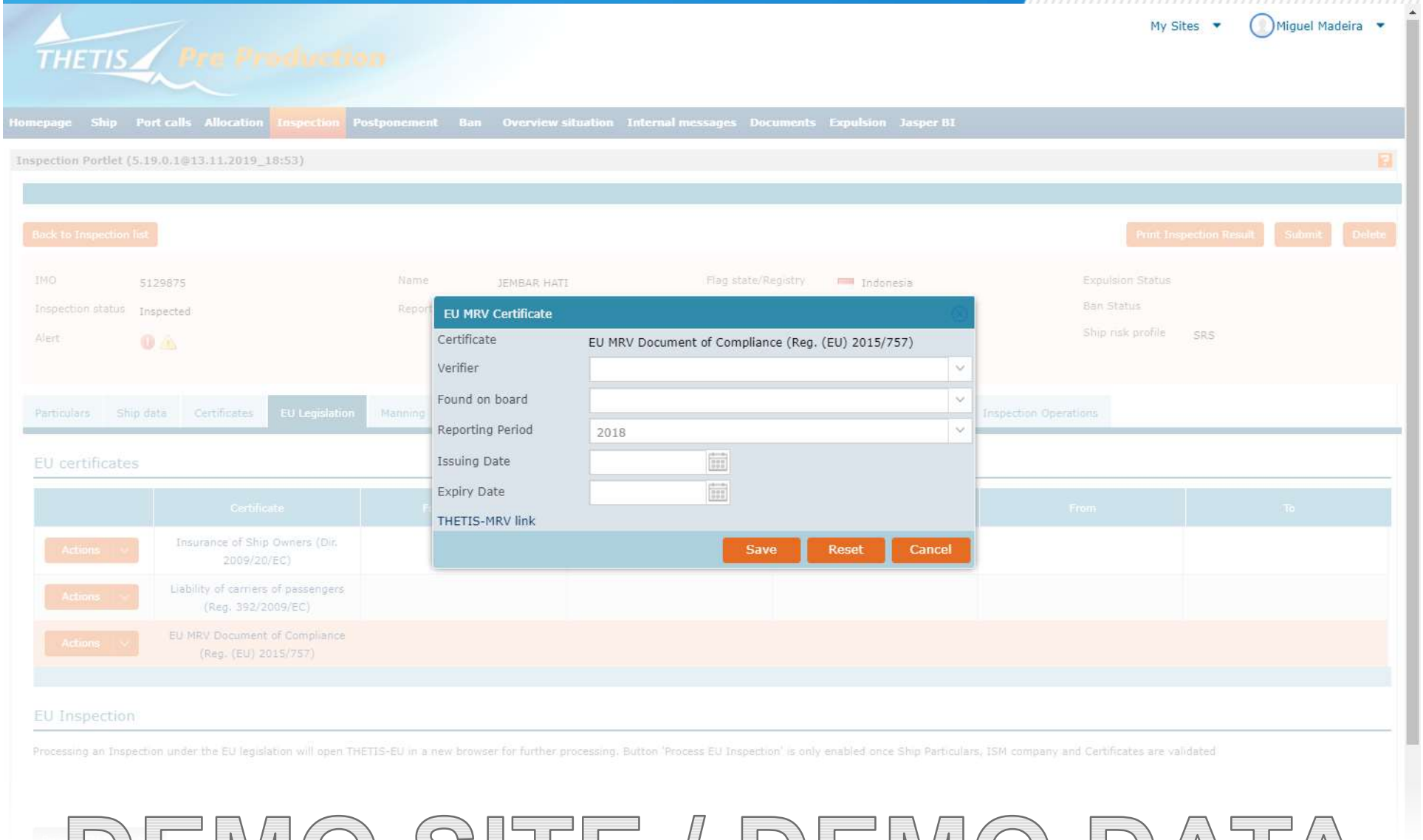
DEMO SITE / DEMO DATA

Reporting DoC on a PSC inspection



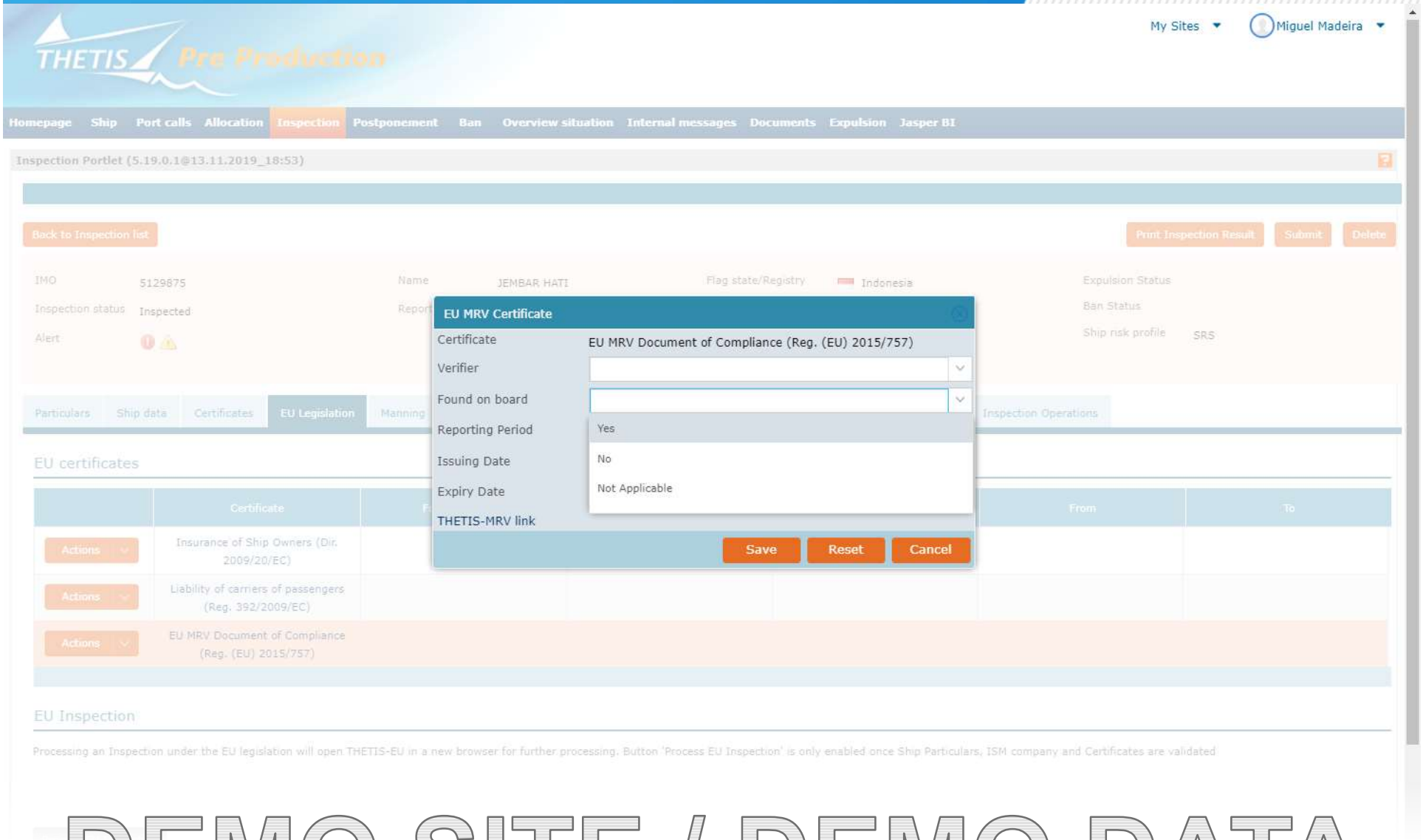
DEMO SITE / DEMO DATA

THETIS-MRV Link



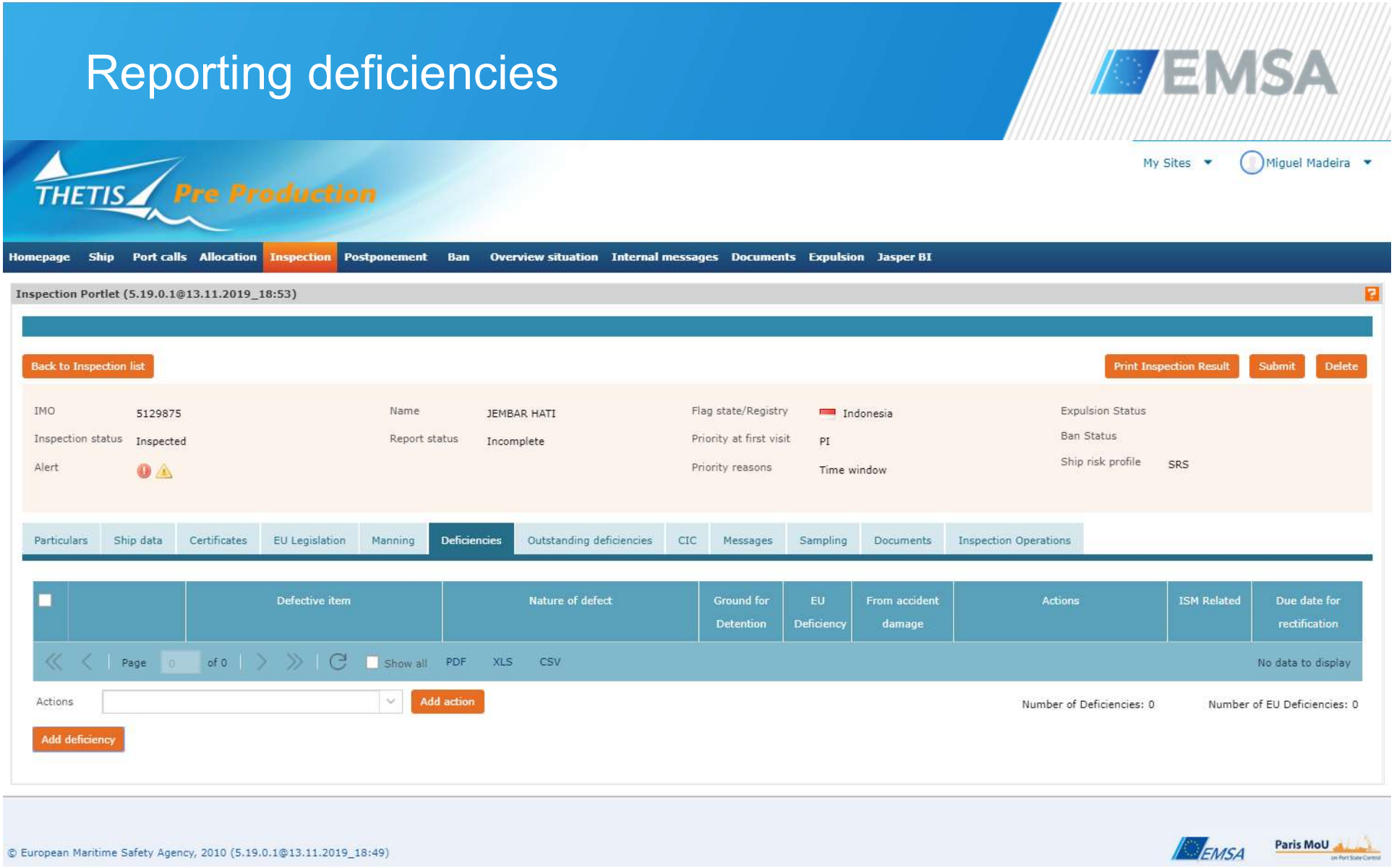
DEMO SITE / DEMO DATA

MRV DoC “Found on Board” field



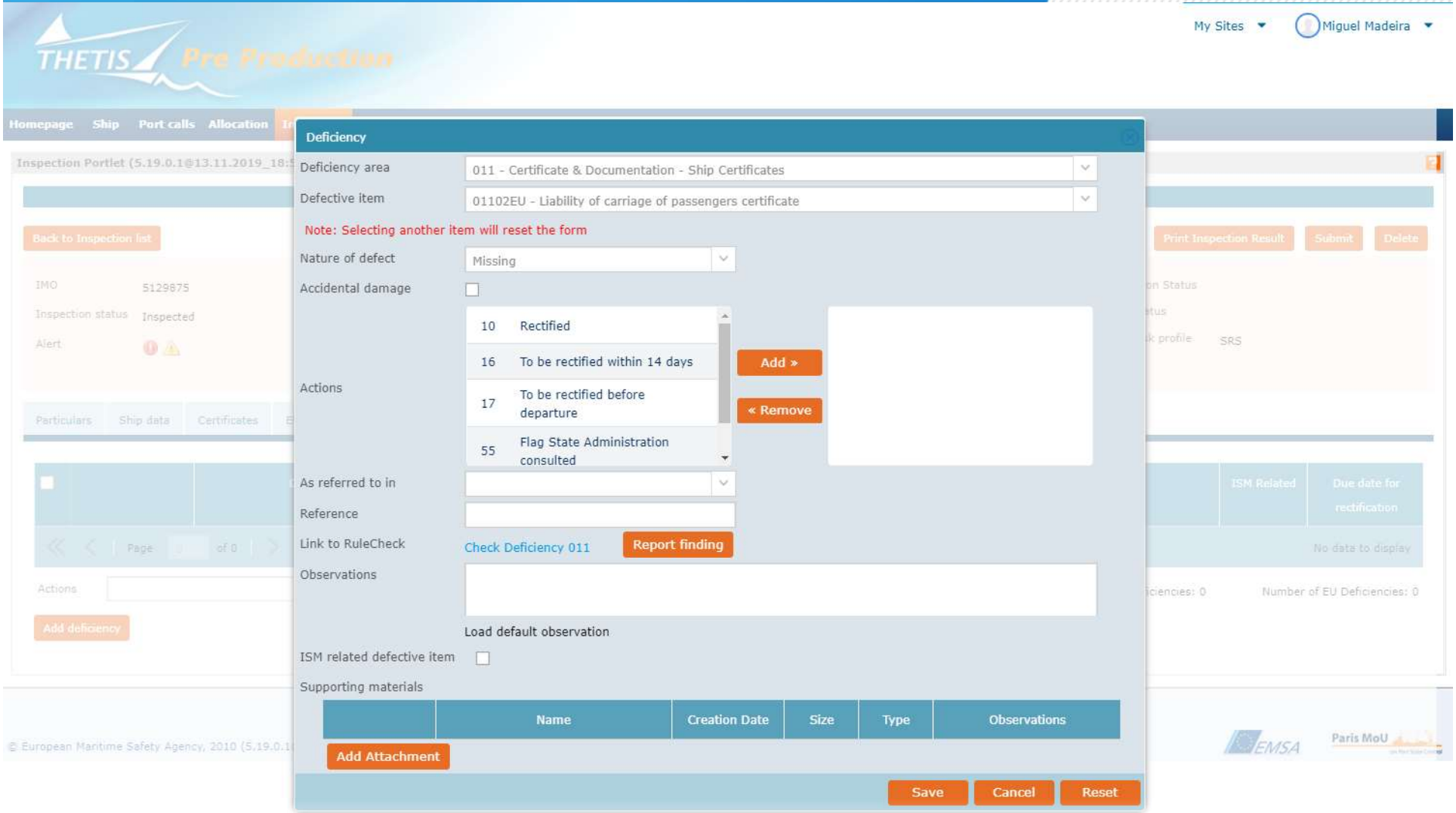
DEMO SITE / DEMO DATA

Reporting deficiencies



DEMO SITE / DEMO DATA

Deficiencies details

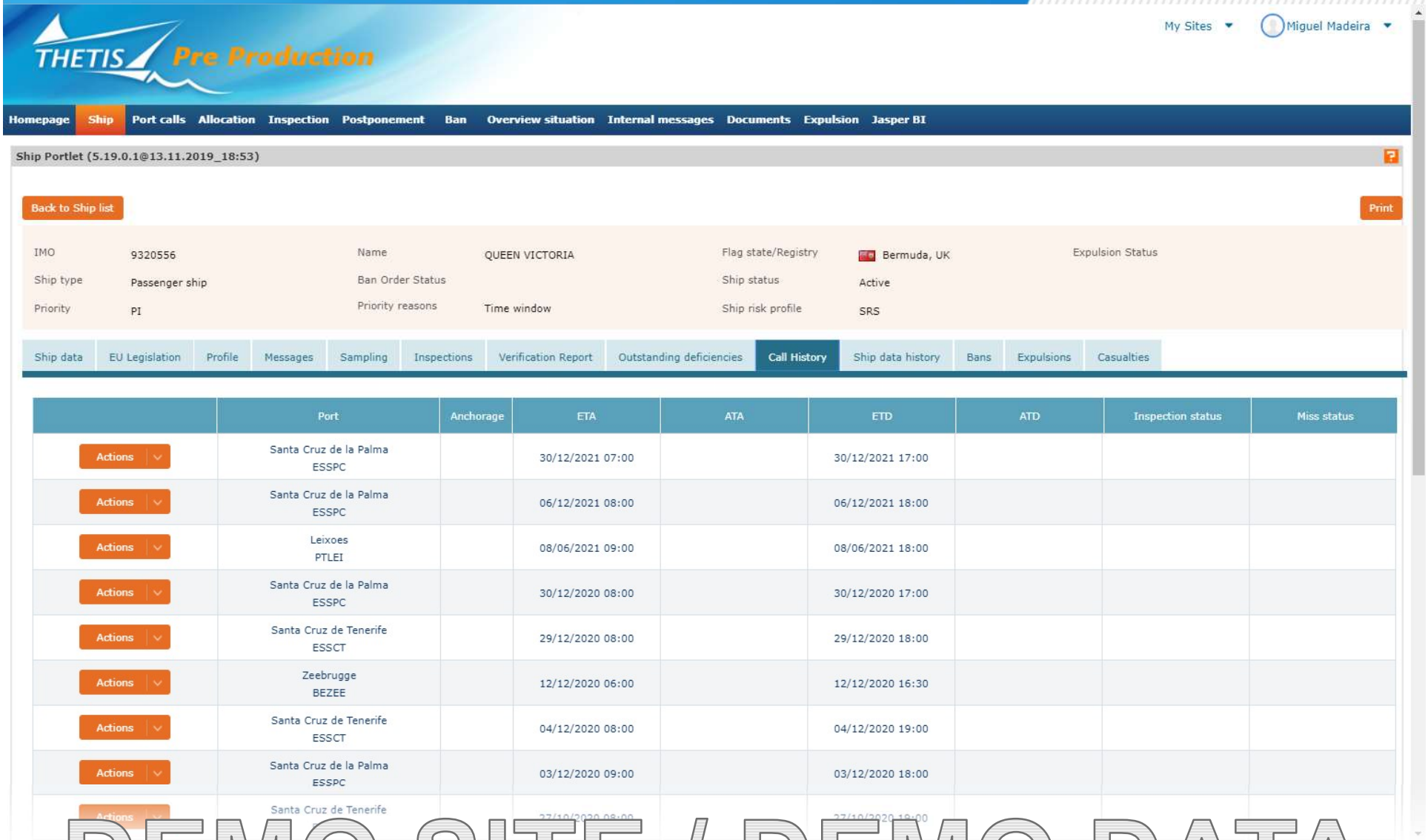


DEMO SITE / DEMO DATA

Deficiencies & EU Deficiencies

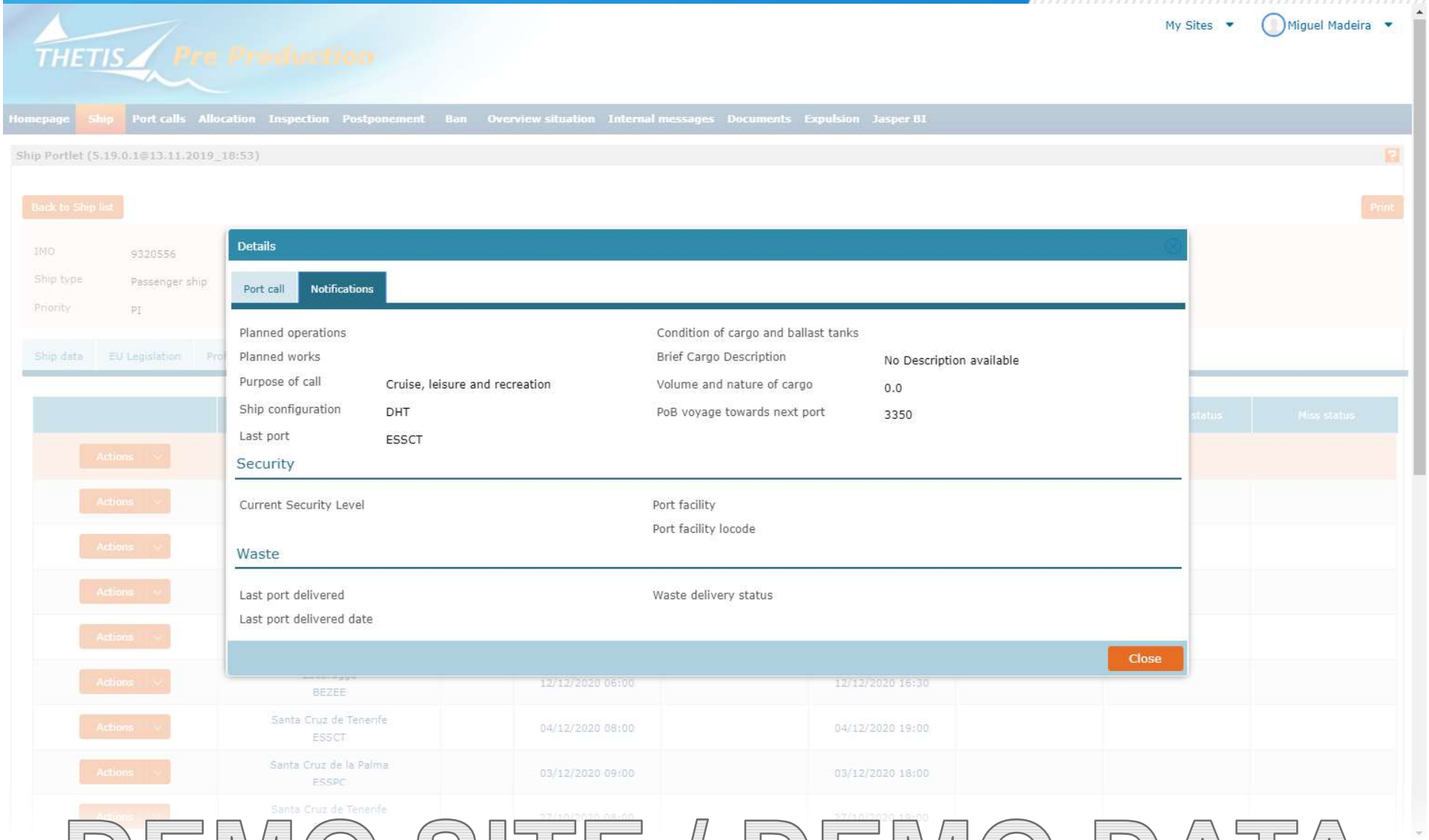
DEMO SITE / DEMO DATA

Port Call information



DEMO SITE / DEMO DATA

Purpose of the Port Call



DEMO SITE / DEMO DATA

Enforcement by Flag State

Article 19.1

There is no solution yet for Q3, Q4 and Q5!

Q1: How do I ensure my ships are in compliance?

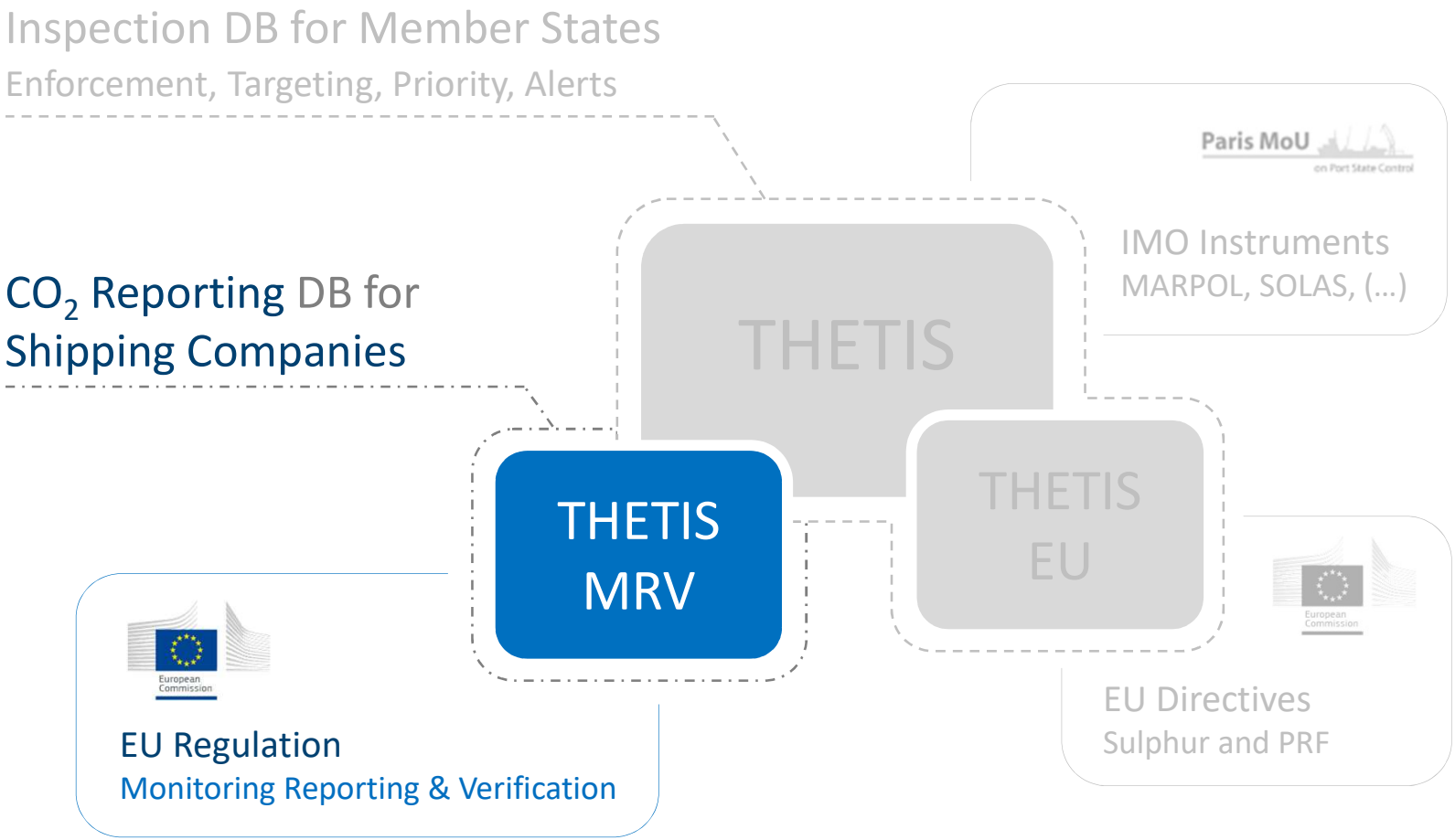
Q2: How do I ensure ships calling my ports are in compliance?

Q3: How can I record follow-up actions e.g. penalties and expulsion orders?

Q4: How will this information be exchanged within my National Authorities?

Q5: How will this information be shared with Commission, EMSA and other MS/Flag concerned?

However…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THETIS
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Sulphur and PRF
European Commission
EU Regulation
Monitoring Reporting & Verification

Public section

EMSA THETIS-MRV | EU MRV | CO_2 EMISSION REPORT | FAQ | Welcome Miguel Flag PT (Flag, Self register, ver 4.6.5) | Menu | Logout

Publication of information in accordance with Article 21 of Regulation (EU) 2015/757 on the monitoring, reporting and verification of CO_2 emissions from maritime transport. Information is accessible through the search tool or can be exported in a spreadsheet for further analysis. Since 30 June 2020, all the verified information submitted by companies to the European Commission for the reporting year 2019 is accessible.

IMO Number | Ship Name | Reporting Period | Ship type

Search | Reset

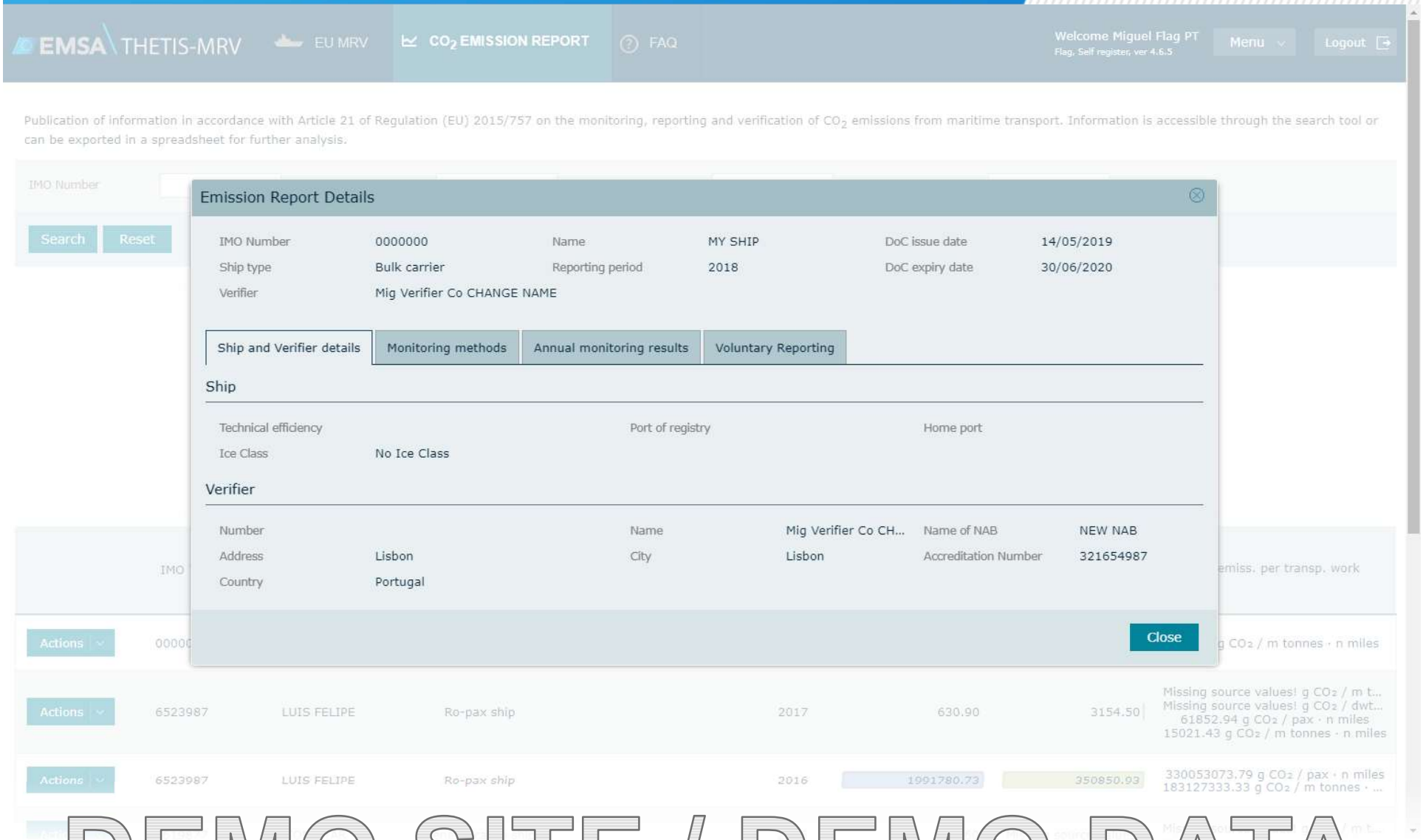
	IMO	Name	Ship Type	Technical efficiency: Type	Technical efficiency: ($gCO_2/t{\cdot}nm$)	Reporting Period	Total CO_2 emissions [m tonnes]	CO_2 emiss. per distance [kg CO_2 / n mile]	CO_2 emiss. per transp. work
Actions	0000000	MY SHIP	Bulk carrier			2018	62.28	415.20	276.80 g CO_2 / m tonnes · n miles
Actions	6523987	LUIS FELIPE	Ro-pax ship			2017	630.90	3154.50	Missing source values! g CO_2 / m t... Missing source values! g CO_2 / dwt... 61852.94 g CO_2 / pax · n miles 15021.43 g CO_2 / m tonnes · n miles
Actions	6523987	LUIS FELIPE	Ro-pax ship			2016	1991780.73	350850.93	330053073.79 g CO_2 / pax · n miles 183127333.33 g CO_2 / m tonnes · ...
Actions	6619877	UNION STAR 43	General cargo ship			2016	382.60	Missing source values!	Missing source values! g CO_2 / m t... Missing source values! g CO_2 / dwt...

Page 1 of 1 | Displaying 1 - 4 of 4

	Reporting Period	Version	Generation Date	File
Actions	2018	1	27/06/2019	2018-v1-27062019-EU MRV Publication of infor...
Actions	2017	5	26/11/2019	2017-v5-26112019-EU MRV Publication of infor...

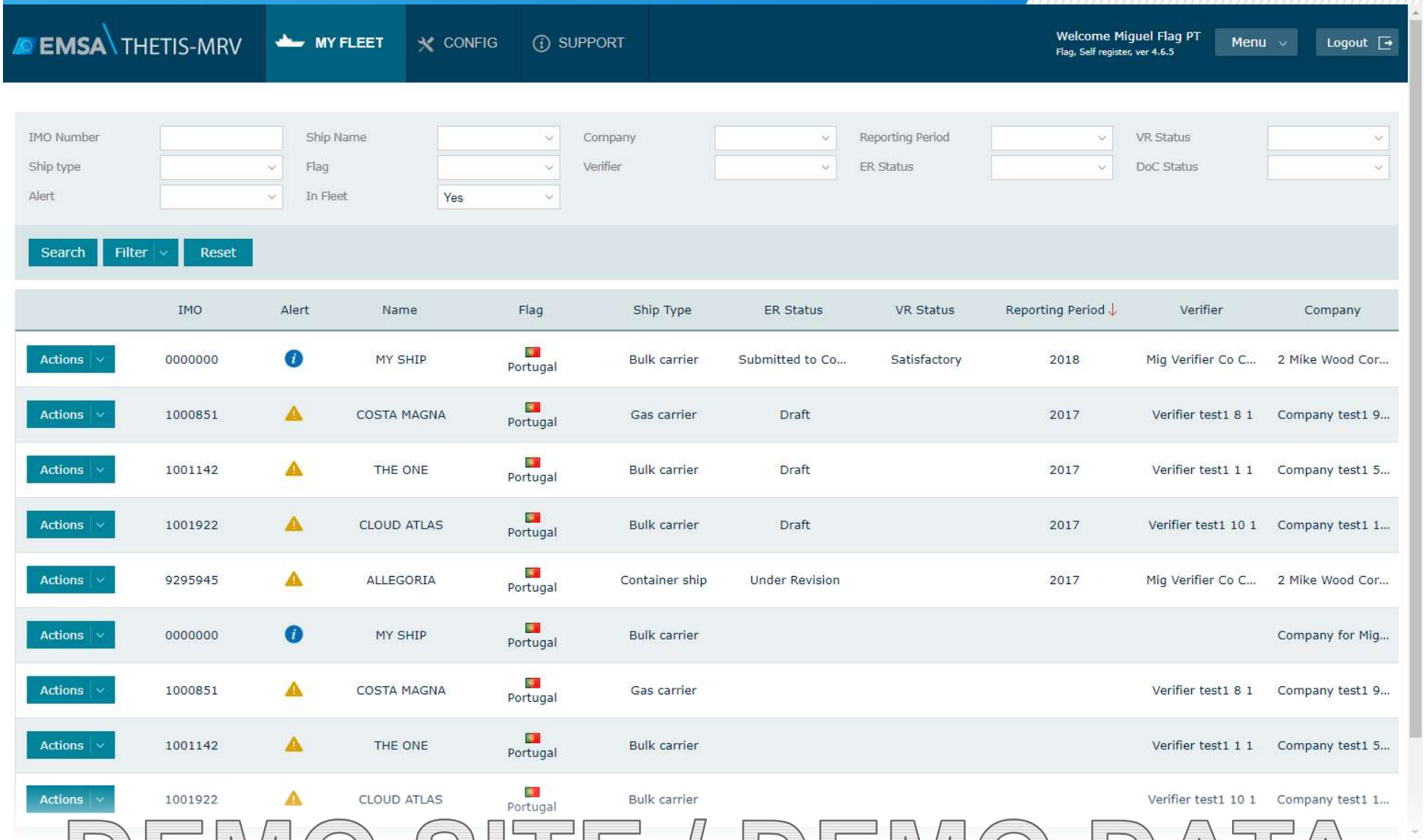
DEMO SITE / DEMO DATA

DoC information on the public section



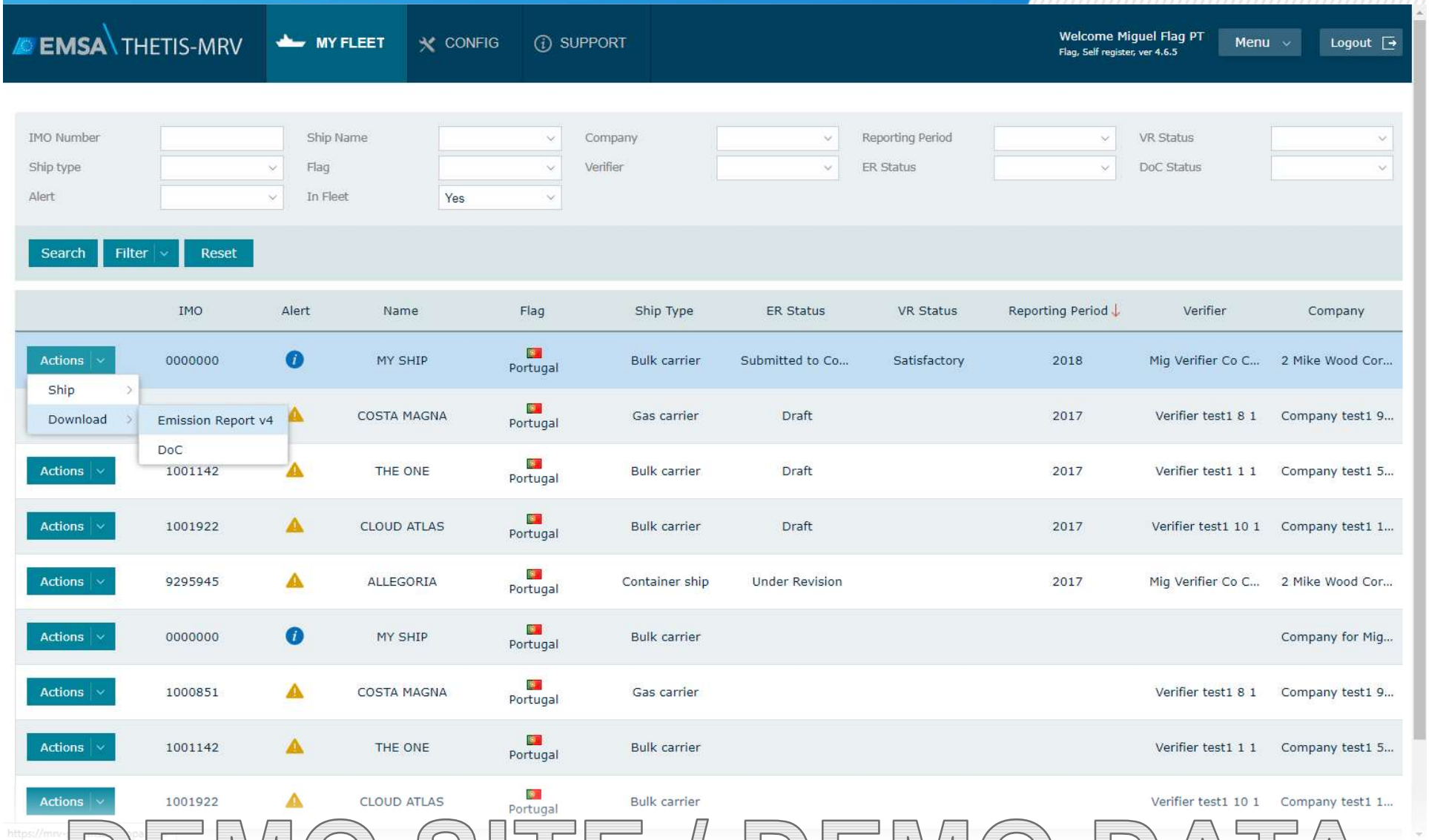
DEMO SITE / DEMO DATA

Restricted section for Flat State users



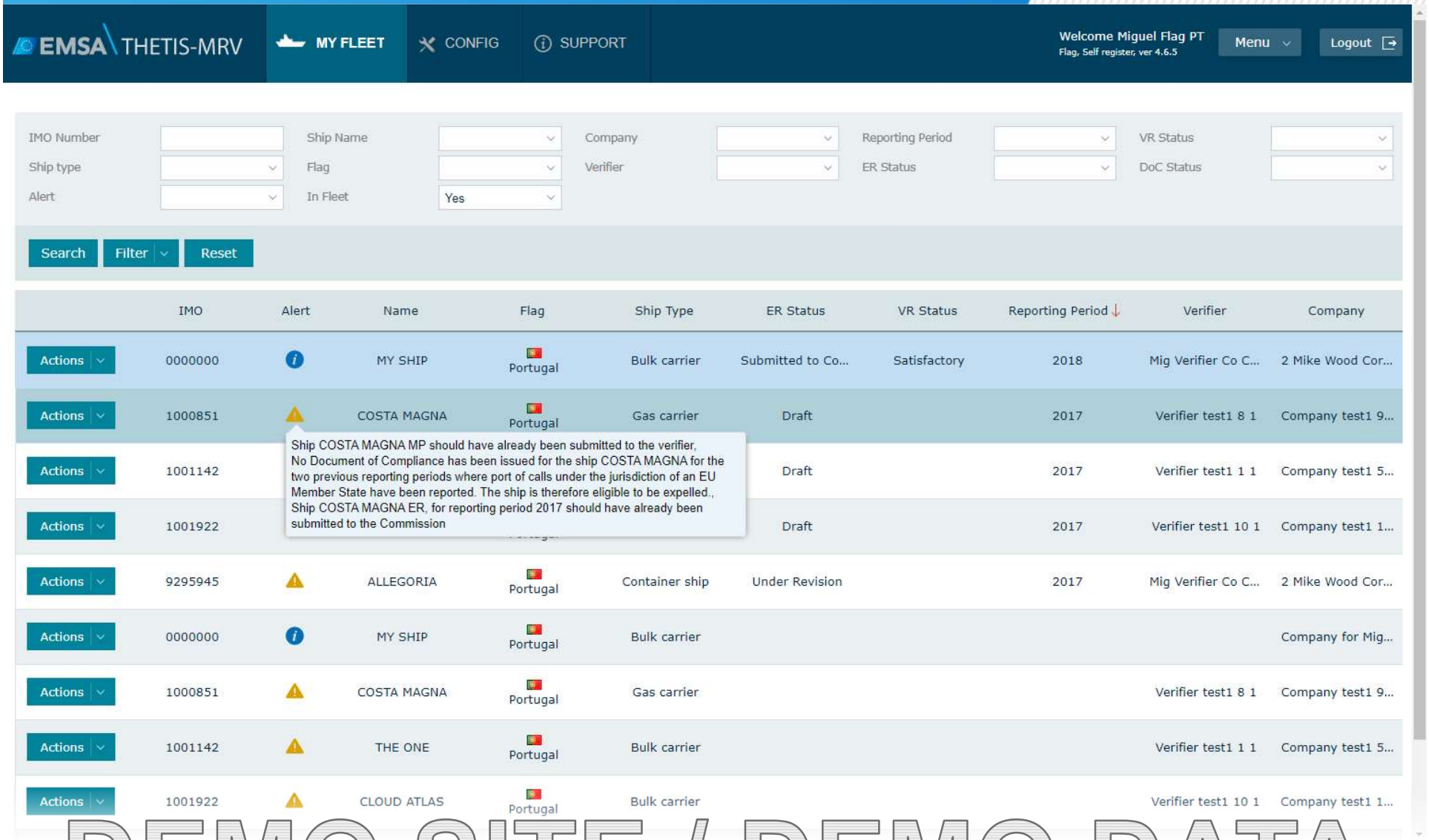
DEMO SITE / DEMO DATA

Download ER and DoC



DEMO SITE / DEMO DATA

Flag user restricted section



DEMO SITE / DEMO DATA

Conditions for disclosure of information

Back to MyFleet | Download | Print to PDF | Data history

IMO	0000000	Name	MY SHIP	Company	Company for Mig Comp 2	MP status		VR status	Satisfactory
Ship type	Bulk carrier	Flag	Portugal	Verifier		ER status	Submitted to Commission	DoC status	Valid

Ship | Company | Verifier | Voyage figures | Publication of information

Different level of publication of information or no publication at all following the provision of the EU MRV Regulation article 21, paragraph 3, shall be requested to the European Commission. Once accepted, the European Commission will request the system administrator to add the emission information as agreed.

	Reporting Period ↓	Type of publication	Text for publication	Public supporting information
Actions	2018	No publication		

Page 1 of 1 Displaying 1 - 1 of 1

DEMO SITE / DEMO DATA

Enhancements for Flag Sate users

Priority	Artifact ID	Title	Module
Highest	artf62979	Provide a better way for Flag State users to download ER and DoC information	ER/VR, Batch job
High	artf47635	Improve messages on missing DoC and expulsion by cross-checking with THETIS the existence of port-calls within the EU (linked to artf47359).	Config, Ship
Medium	artf47359	Implement feedback information on the DoC status to THETIS and THETIS-EU (linked to artf47635)	Config, Public

Important notes to recap…

1. New flagged ships which are not added by their companies, will not be listed.

2. Private access provides more information on own Flag than the public access.
   - Own flag vessels only
   - Document status (ER, VR and DoC)
   - Info on different level of aggregation or no publication
   - Company details
   - Download copies of the Verified ER and DoC
   - *On a future enhancement: Bulk download of information*

3. Port Call information for a RP is available, but the purpose of the call is not reliable. Further investigation may be required.

4. THETIS for PSC covers inspections on foreign vessels. For own Flag vessels, currently, there is no solution implemented.

Thank you!

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European Maritime Safety Agency