



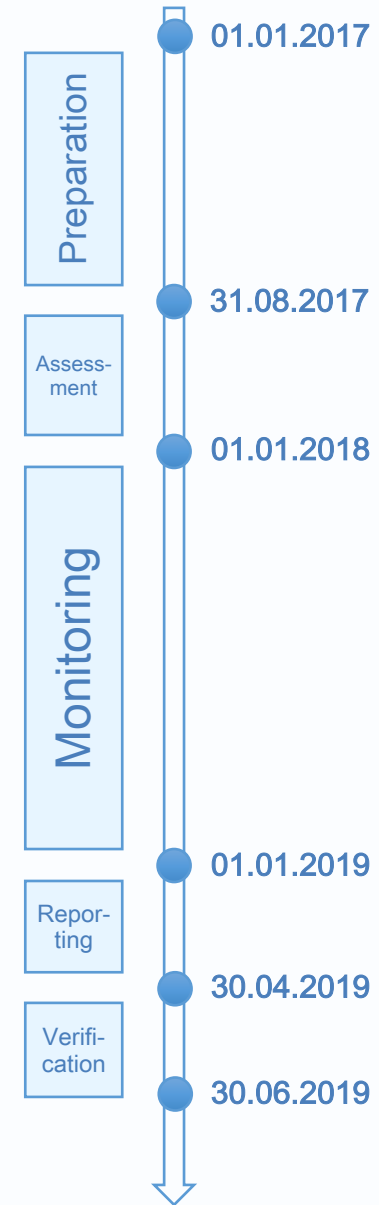
March 2017



May 2017

IT Service Platform for the EU MRV and more ...

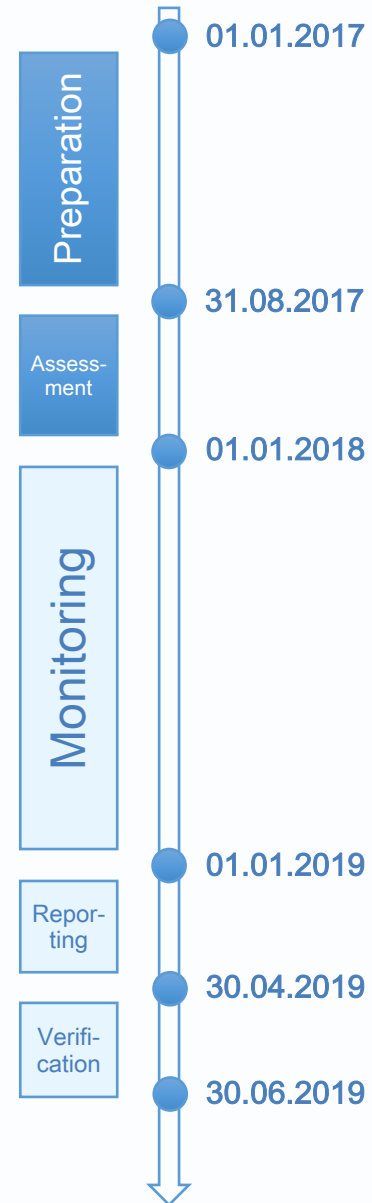
May 2017



EU MRV
Regulation 2015/757

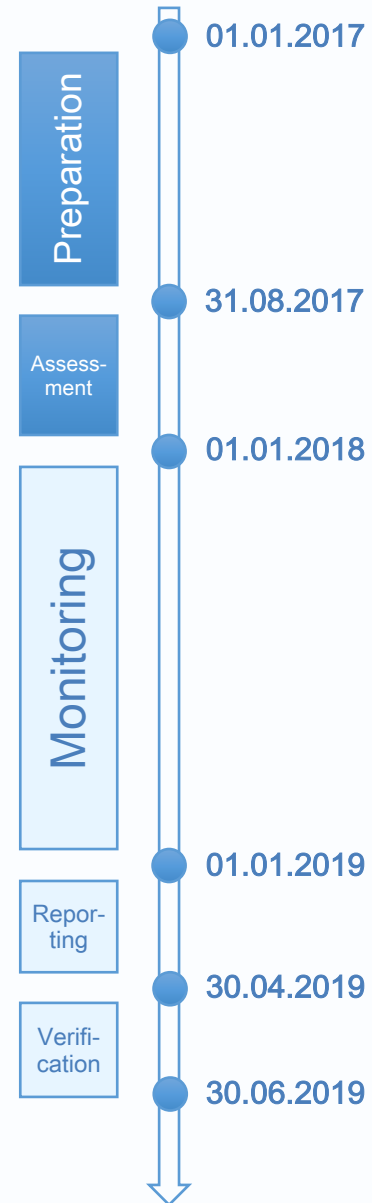
- Vessels registry
- Monitoring plan workflow
 - Registry
 - Plan wizard with multiple templates
 - Events history, attachments, snapshots, revisions
- Copy plans, copy templates

💡 Ask for a login to test it



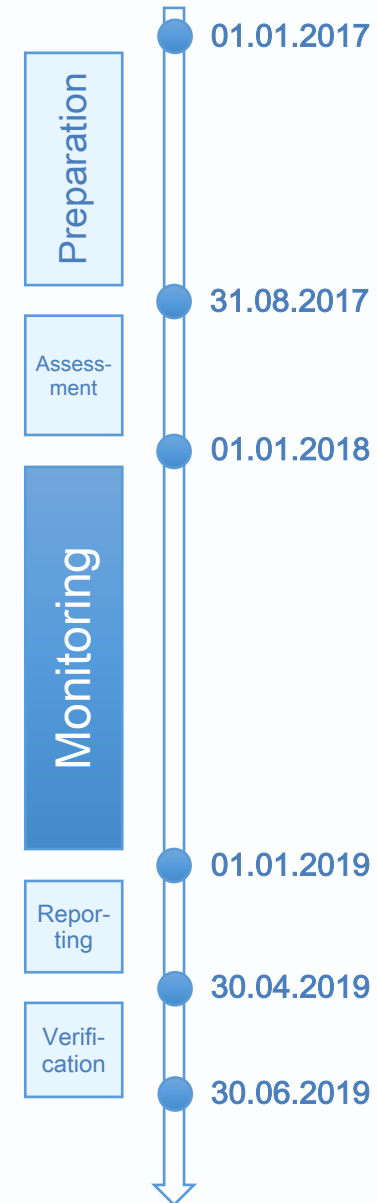
- Templates - company specific, type specific, sister vessels specific, custom
- Inline dialogue with verifier within IMRV
 - Stages (Draft, Verification, Feedback, Approved)
 - Dialogue per each section of the plan
 - Notifications
- Novoprof will download your fleet from the IHS Database

💡 All communications will go via our platform which results in time saving for the Verifier



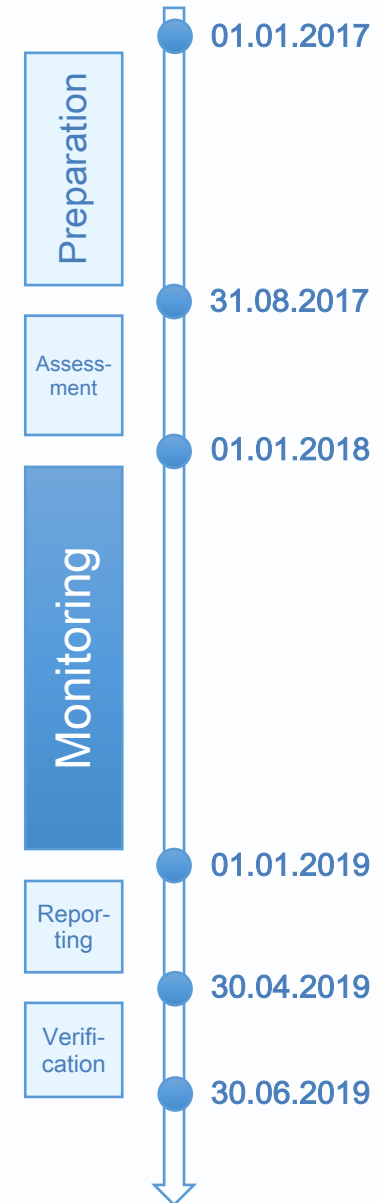
- Via IMRV Vessel Client
- Via transfer from existing systems

💡 You can test the **IMRV** client for free



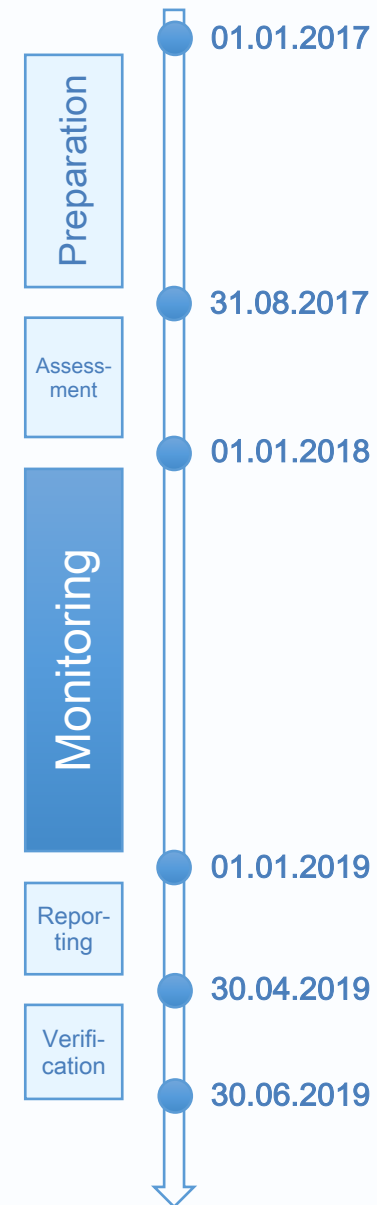
- Easy to install (via small email attachment)
- Validation of data on board the vessel to avoid faulty input!
- User friendly (no extensive manual required)
- Offline input
- Data mailed via email (encrypted) to **IMRV** shore database

💡 Some verifiers will reduce their rates when **IMRV Vessel Client** is being used

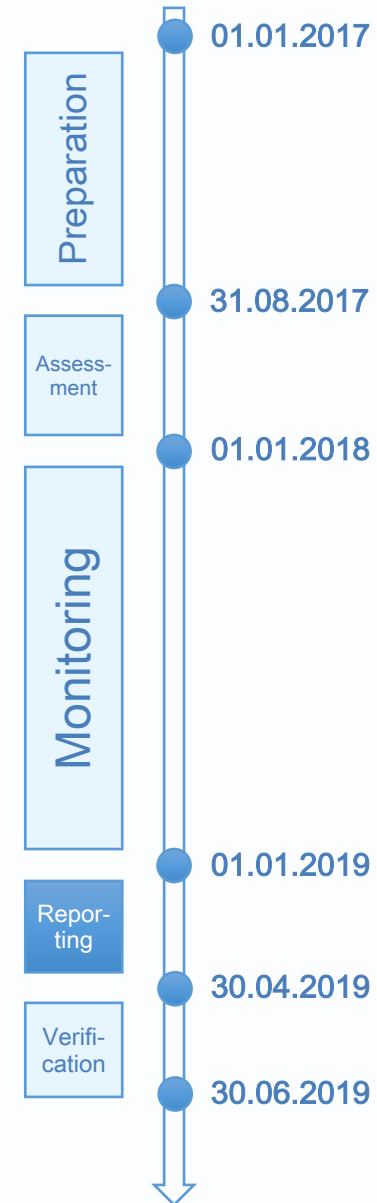


- Via the **IMRV** API (Application Programming Interface).
 - Customer prepares their own data in line with the structure of the **IMRV** shore database
- Via a direct transfer.
 - Novoprof will assist in making a custom-made interface customer database and **IMRV** shore database

💡 We can perform a GAP analyses on your current data.

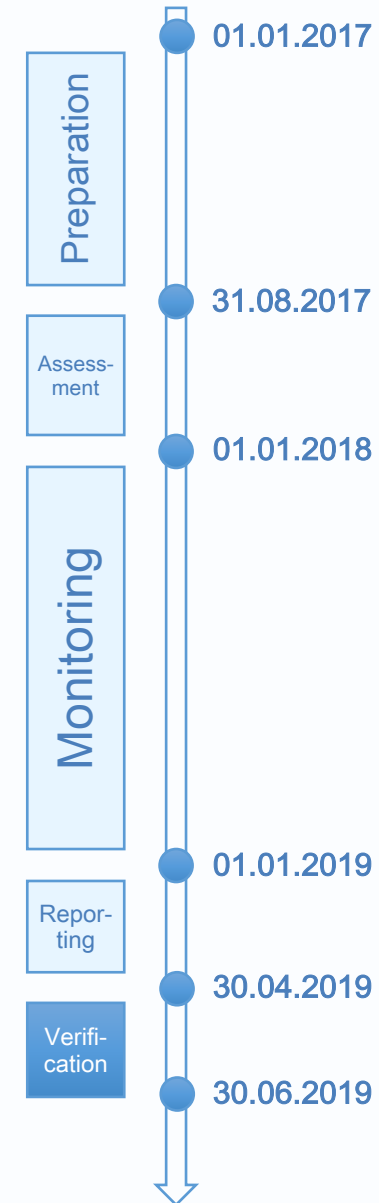


- Secure storage of data
- Access via login (unlimited number of users)
- Exports facilities of data
- Access for verifier
- Work flow for the verification process
- Possibility to pull Emission Report after the data is entered in the system
- Data validation for customers with own data collection system



- Emission report workflow
 - Registry
 - Emission report wizard
 - Events history, attachments
- Inline dialogue with verifier within IMRV
 - Stages (Draft, Verification, Feedback, Verified)
 - Communication of feedbacks with attachments
 - Notifications
- Document of Compliance storage in reports registry, linked to Emission report
- Transmit documents to EU data gate*, when become available (articles 12, 17 of EU 2015/757)

💡 Do not wait till the end of the year. Ask your verifier to check the emission report end January to avoid correcting possible errors at the end of the period.



LIVE EXAMPLE – LOGIN

Novoprof IMRV Service x

Secure | <https://app.imrv.eu/#/signin>

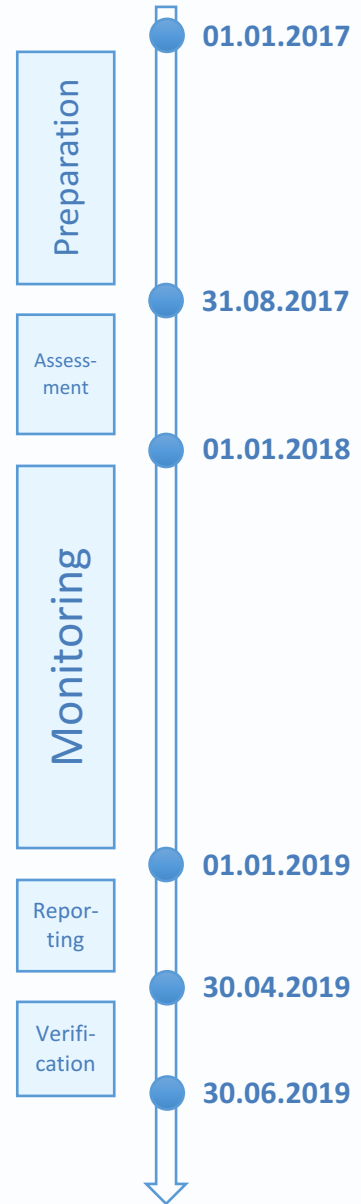
Novoprof IMRV

Please sign in

Username

Password

Sign in



LIVE EXAMPLE – USER MANAGEMENT

Novoprof IMRV Service x

Secure | https://demo.imrv.eu/#/users

Space Shipping Inc

Administration

Users

Username ↑	Full name	E-mail	Role	Enabled	UpdatedBy	Updated	CreatedBy	Created
admin_space_shipping			Admin	✓				
space_shipping_inc	Daniël Wittert	space_shipping@gmail.com	User	✓	admin_space_shipping	29/12/2016 10:45		

Novoprof IMRV Service. © 2016–2017 Novoprof B.V. All rights reserved. Build: 2017-03-03 18:50:01

Preparation

01.01.2017

31.08.2017

01.01.2018

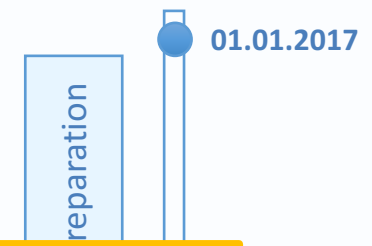
01.01.2019

30.04.2019

30.06.2019

LIVE EXAMPLE – REGISTRY OF VESSELS

IMO Number	Vessel ↑	Vessel Type	Flag	Port of registry	Owner
9399489	SPACE LINES1	Ro-pax ship	LT	Klaipeda	Space Shipping Inc
9872690	SSI Achernar	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9013464	SSI Acrux	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9482275	SSI Aldebaran	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9048706	SSI Alioth	Bulk carrier	SG	Singapore	Space Logistics Pte Ltd
9086796	SSI Alphard	Bulk carrier	SG	Singapore	Space Shipping Inc
9574963	SSI Anser	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9699359	SSI Antares	Chemical tanker	NO	Bergen	Space Logistics Pte Ltd
9346861	SSI Arcturus	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9070981	SSI Atria	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9075400	SSI Canopus	Chemical tanker	SE	Gothenburg	Space Logistics Pte Ltd
9681390	SSI Capella	General cargo ship	PT	Sines	Space Logistics Pte Ltd
9355630	SSI Deneb	Bulk carrier	ES	Las Palmas	Space Logistics Pte Ltd
9680736	SSI Enif	Chemical tanker	SE	Gothenburg	Space Shipping Inc



08.2017

01.2018

01.2019

04.2019

06.2019

LIVE EXAMPLE – VESSEL CARD

Registry / Vessels
Edit Vessel

Name * SPACE LINES1 IMO number * 9399489

Owner * Space Shipping Inc Operator * Space Shipping Inc

Document holder
Space Shipping Inc

General Fuel consumers Fuel tank layout Statements

Classification and Registration

Vessel type * Ro-pax ship P&I Club P&I Club

Official number LYAC Flag Lithuania

Classification society Rina Port of registry Klaipeda

Ice class Select polar class Home port Home port

Area allocation ratio (ISO 16258:2012)

Mass * 66 % No. of passengers *

Technical efficiency

EEDI EEDI EIV

Tonnages and performance

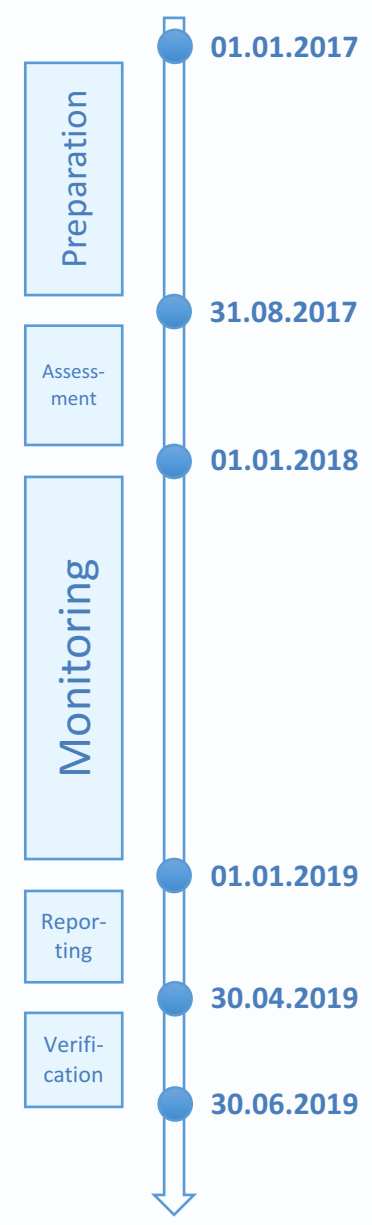
Deadweight 8,126 MT Net tonnage

Gross tonnage 26,141 Max speed

Construction

Build country Italy Build year

Build yard Build yard



LIVE EXAMPLE – VESSEL EMISSION SOURCES

Space Shipping Inc

Registry / Vessels

Edit Vessel

General Fuel consumers Fuel tank layout Statements

Consumer #1

Name * Wartsila 12V46C

Type * Main

Fuel grade(s) * Heavy fuel oil (HFO) X

Technical description
Serial no PAAE026674, Power output 12600kW, RPM 500

Consumer #2

Name * Wartsila 12V46C

Type * Main

Fuel grade(s) * Heavy fuel oil (HFO) X

Technical description
Serial no PAAE026675, Power output 12600kW, RPM 500

Consumer #3

Name * Wartsila 9L20

Type * Auxilliary

Fuel grade(s) * Diesel/Gas oil X

Technical description
Serial no PAAE026676, power output 1680 kW, RPM 900

Wartsila 9L20 Auxilliary Diesel/Gas oil X

Novoprof IMRV Service. © 2016–2017 Novoprof B.V. All rights reserved. Build: 2017-03-03 18:50:01

reparation

01.01.2017

31.08.2017

01.01.2018

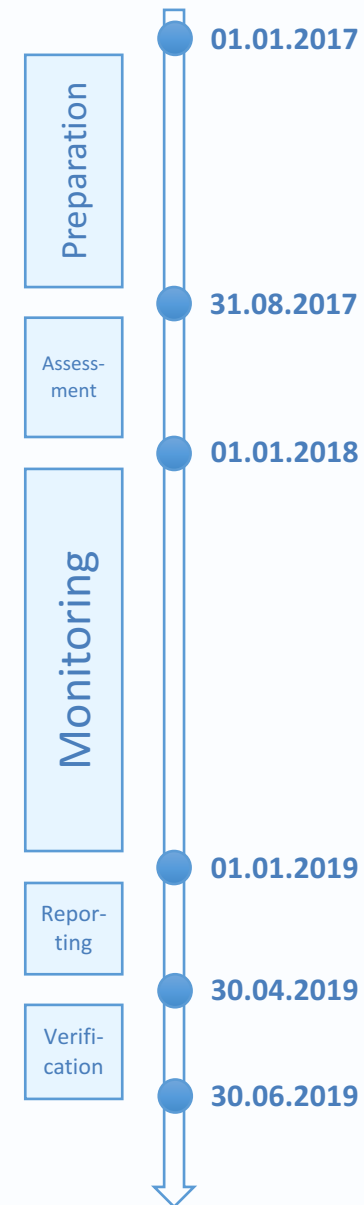
01.01.2019

30.04.2019

30.06.2019

LIVE EXAMPLE – VESSEL REPORTS CONFIGURATION

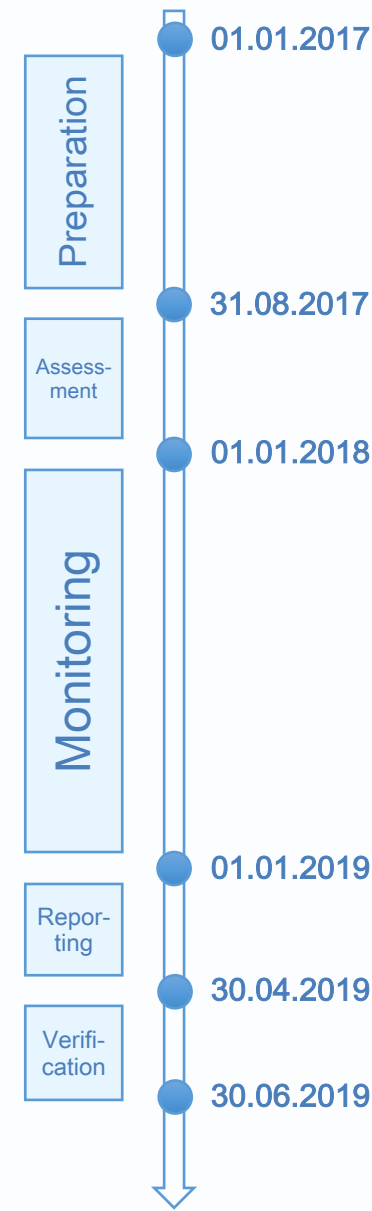
The screenshot shows the 'Edit Vessel' configuration page in the IMRV system. The page is titled 'Registry / Vessels' and 'Edit Vessel'. The vessel name is 'SPACE LINES1' and its IMO number is '9399489'. The owner is 'Space Shipping Inc' and the operator is also 'Space Shipping Inc'. The document holder is 'Space Shipping Inc'. The 'Statements' tab is selected, showing configuration options for reporting. A blue box contains the text: 'These settings define the configuration of fields and parameters used for Statements of facts reported from sea to shore.' Below this, there is a checked checkbox for 'Use detailed fuel consumption specifications per consumer type'. The 'Fuel grade(s) to include in a statement' field contains 'Heavy fuel oil (HFO)' and 'Diesel/Gas oil'. The 'Cargo grade(s) to include in a statement' field is currently empty with a placeholder 'Select one or more cargo grades...'. A sidebar on the left lists various navigation options like Dashboard, Monitoring, Verification, Reporting, Registry, and Administration.



LIVE EXAMPLE – MONITORING PLANS

Space Shipping Inc admin_space_shipping ▾

Dashboard	SPACE LINES1 (9399489)	Draft	Company specific SSI Ro-pax template	01/01/2016	Space Shipping Inc	John Doe	09/03/2017 12:40	⋮
Monitoring	SSI Alphard (9086796)	Draft	Company specific	10/01/2017	Space Shipping Inc	Jane Doe	20/02/2017 11:42	⋮
Statements	SSI Antares (9699359)	Draft	SSI Chemical tanker template	28/12/2016	Space Logistics Pte Ltd	James Lee	10/01/2017 12:43	⋮
Port calls	SSI Arcturus (9346861)	Approved	SSI Chemical tanker template	10/01/2017	Space Logistics Pte Ltd	James Lee	09/03/2017 11:21	⋮
Verification	SSI Capella (9681390)	Draft		10/01/2017	Space Logistics Pte Ltd	James Lee		⋮
Monitoring plans	SSI Fomalhaut (9504994)	Verification	SSI Chemical tanker template	10/01/2017	Space Logistics Pte Ltd	James Lee	09/03/2017 11:15	⋮
Reporting	SSI Peacock (9602629)	Draft	Company specific	10/01/2017	Space Logistics Pte Ltd	James Lee	10/01/2017 12:54	⋮
Interim	SSI Polaris (9659402)	Feedback	Company specific	26/12/2016	Space Shipping Inc	John Doe	10/01/2017 13:49	⋮
Final New	SSI Regulus (9917880)	Draft	SSI Ro-pax template	26/12/2016	Space Logistics Pte Ltd	James Lee	20/02/2017 18:51	⋮
Registry	SSI Rigel (9628192)	Verification	Company specific	10/01/2017	Space Logistics Pte Ltd	James Lee	09/03/2017 11:18	⋮
Companies	SSI Sirius (9880063)	Draft		10/01/2017	Space Logistics Pte Ltd	James Lee	10/01/2017 12:52	⋮
Contacts	1 - 11 of 11 items							
Vessels	1 - 11 of 11 items							
Ports	1 - 11 of 11 items							
Cargo	1 - 11 of 11 items							
Fuel grades	1 - 11 of 11 items							



LIVE EXAMPLE – MONITORING PLAN ACTIVITIES

Space Shipping

Dashboard

Monitoring

Statements

Port calls

Verification

Monitoring

Reporting

Interim

Final

Registry

Companies

Contacts

Vessels

Ports

Cargo

Fuel grades

Verification / Monitoring plans

SPACE LINES1 (9399489)

+ Add event/Change status
Submit to verifier
Edit

Draft

Verification

Feedback

Approved

Verifier company

Space Verifier Company

Status

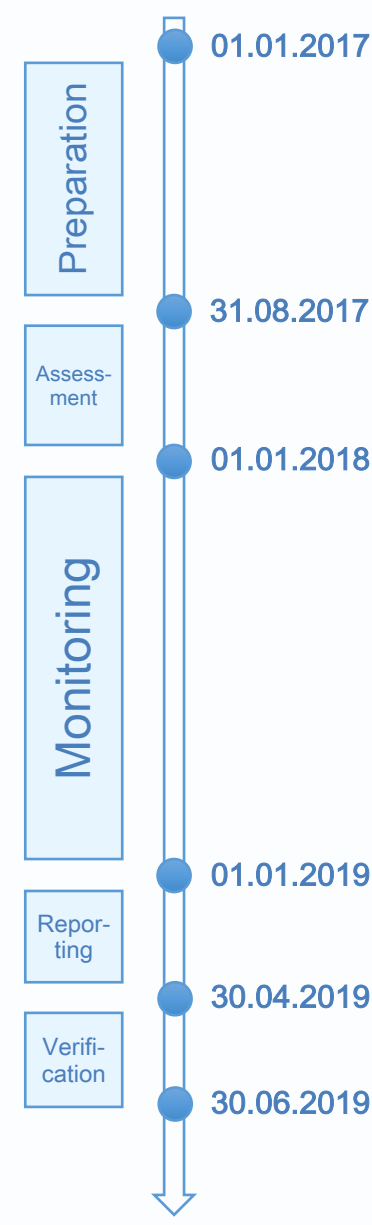
Created: 07/03/2017 16:29 by space_shipping_inc

Updated: 09/03/2017 12:40 by space_shipping_inc

Last submit: 09/03/2017 12:33 by space_shipping_inc

Events

Draft	09/03/2017 12:39 by space_shipping_inc Back from draft verification
Feedback	09/03/2017 12:38 by space_verifier Please see comments to the section C.
Verification	09/03/2017 12:33 by space_shipping_inc Please see the documentation on the emission sources attached. <ul style="list-style-type: none"> Emission sources documentation - Auxiliary.pdf Emission sources documentation - Boiler.pdf Emission sources documentation - Main engines.pdf
Draft	09/03/2017 12:23 by space_shipping_inc Back from draft verification
Feedback	09/03/2017 12:21 by space_verifier We have gone through the submitted MP and these are our initial comments. In order to further go through we will need: <ol style="list-style-type: none"> The class certificate of the vessel; The IAPP certificate of the vessel; The machinery layout confirming the emission sources included in the MP;



Verification / Monitoring plans

Lysvik Seaways (9144251)

Display review state

Clone

Print

Close

On this form you are modifying vessel specific monitoring plan that has a link to template. The sections, fields and attachments that are defined in the template are read-only and marked with **template** on this vessel specific plan form. To modify the sections and procedures described in the template, proceed to the

- [Lys Line vessels](#)

template entry page.

Revisions

Version No	Reference date	Status at reference date	Description
1.0 →	16/02/2017 18:17	Final draft submitted to the verifier	Initial revision

All attached files will be displayed to the verifier immediately.

Attachments

Click to select or drop attachments here

Data gaps - distance travelled.docx

template

Data gaps - fuel consumption.docx

template

Monitoring Plan contents

Attachments

B. Basic data

- ✓ B.1. Identification of the ship
- ✓ B.2. Company information
- ✓ B.3. Emission sources
- ✓ B.4. Emission factors
- ✓ B.5. Emission sources completeness

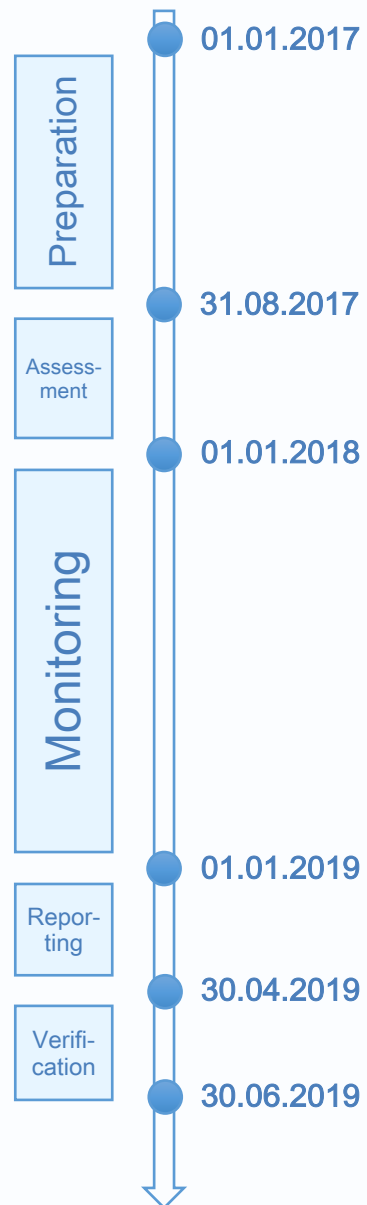
C. Activity data

- ✓ C.1. Per-voyage exemption
- C.2. Monitoring of fuel consumption
- ✓ C.3. List of voyages
- ✓ C.4. Distance travelled
- ✓ C.5. Cargo and passengers
- ✓ C.6. Time spent at sea

D. Data gaps

- ✓ D.1. Fuel consumption estimation
- ✓ D.2. Distance data gaps
- ✓ D.3. Cargo carried data gaps
- ✓ D.4. Time at sea data gaps

E. Management



Verification / Monitoring plans

Lysvik Seaways (9144251)

Display review state

Clone



Close

B.3. Emission sources and fuel types used

Regulation (EU) 2015/757 Article 6 (3c): a description of the following CO2 emission sources on board the ship: main engines, auxiliary engines, gas turbines, boilers and inert gas generators, and the fuel types used.

Emission sources are defined and described in vessel profile. Proceed to [vessel profile](#) to update the list or particularities of emission sources.

No.	Name, type	Technical description	Fuel type
1	Wartsila Diesel Oy 6L46C Propulsion	Serial no 9794. power output 6300kW, RPM 500	Light fuel oil (LFO)
2	SCANIA Auxilliary	AUX1 Serial no: 5564011	Diesel/Gas oil
3	SCANIA Auxilliary	AUX2 serial no: 5564010	Diesel/Gas oil
4	SCANIA Auxilliary	AUX3 Serial no: 5564009	Diesel/Gas oil

Monitoring Plan contents

Attachments

B. Basic data

- ✓ B.1. Identification of the ship
- ✓ B.2. Company information
- ✓ B.3. Emission sources
- ✓ B.4. Emission factors
- ✓ B.5. Emission sources completeness

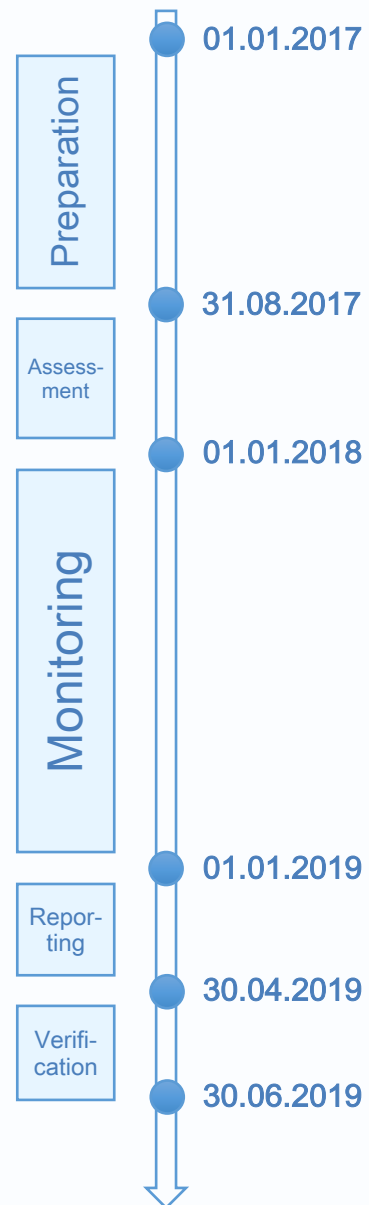
C. Activity data

- ✓ C.1. Per-voyage exemption
- C.2. Monitoring of fuel consumption
- ✓ C.3. List of voyages
- ✓ C.4. Distance travelled
- ✓ C.5. Cargo and passengers
- ✓ C.6. Time spent at sea

D. Data gaps

- ✓ D.1. Fuel consumption estimation
- ✓ D.2. Distance data gaps
- ✓ D.3. Cargo carried data gaps
- ✓ D.4. Time at sea data gaps

E. Management



Verification / Monitoring plans

Lysvik Seaways (9144251)

Display review state

Clone



Close

C.2. Monitoring of fuel consumption

Regulation (EU) 2015/757 Article 6 (3f i-iii): a description of the procedures for monitoring the fuel consumption of the ship, including: (i) the method chosen from among those set out in Annex I for calculating the fuel consumption of each CO2 emission source, including, where applicable, a description of the measuring equipment used, (ii) the procedures for the measurement of fuel uplifts and fuel in tanks, a description of the measuring equipment used and the procedures for recording, retrieving, transmitting and storing information regarding measurements, as applicable, (iii) the method chosen for the determination of density, where applicable.

C.2.1. Methods used to determine fuel consumption of each emission source

template

Emission source	Chosen methods for fuel consumption
All sources	Method B: Bunker fuel tank monitoring on-board

C.2.2. Procedures for determining fuel bunkered and fuel in tanks

template procedure

Title: Determining fuel bunkered and fuel in tanks

Reference: N/A

Version: N/A

Monitoring Plan contents

Attachments

B. Basic data

- ✓ B.1. Identification of the ship
- ✓ B.2. Company information
- ✓ B.3. Emission sources
- ✓ B.4. Emission factors
- ✓ B.5. Emission sources completeness

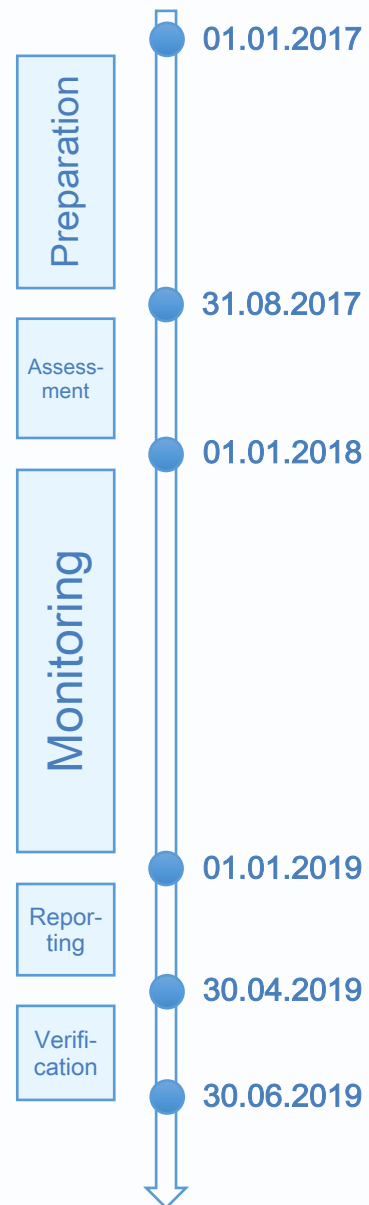
C. Activity data

- ✓ C.1. Per-voyage exemption
- C.2. Monitoring of fuel consumption
- ✓ C.3. List of voyages
- ✓ C.4. Distance travelled
- ✓ C.5. Cargo and passengers
- ✓ C.6. Time spent at sea

D. Data gaps

- ✓ D.1. Fuel consumption estimation
- ✓ D.2. Distance data gaps
- ✓ D.3. Cargo carried data gaps
- ✓ D.4. Time at sea data gaps

E. Management



Verification / Monitoring plans

SPACE LINES1 (9399489)

Add revision

Display review state

Change templates

Clone

Print

Save

Telephone number +31 20 722 1234

E-mail address john.doe@ssi.eu

B.3. Emission sources and fuel types used

Regulation (EU) 2015/757 Article 6 (3c): a description of the following CO2 emission sources on board the ship: main engines, auxiliary engines, gas turbines, boilers and inert gas generators, and the fuel types used.

Emission sources are defined and described in vessel profile. Proceed to vessel profile to update the list or particularities of emission sources.

No.	Name, type	Technical description	Fuel type
1	Wartsila 12V46C Propulsion	Serial no PAAE026674, Power output 12600kW, RPM 500	Heavy fuel oil (HFO)
2	Wartsila 12V46C Propulsion	Serial no PAAE026675, Power output 12600kW, RPM 500	Heavy fuel oil (HFO)

Rejected

09/03/2017 12:09 by space_verifier
The table is not inline with Regulation (EU) 2016/1927.

Machinery layout drawings, engine manuals, photos with the serial no. of the engines not submitted. Also, the classification certificate and IAPP certificate shall be submitted.

09/03/2017 12:26 by space_shipping_inc
Ok. Missing documentation will be attached on the next submit.

What do you want to say?

Comment Cancel

Monitoring Plan contents

Attachments

B. Basic data

- B.1. Identification of the ship
- B.2. Company information
- B.3. Emission sources
- B.4. Emission factors
- B.5. Emission sources completeness

C. Activity data

- C.1. Per-voyage exemption
- C.2. Monitoring of fuel consumption
- C.3. List of voyages
- C.4. Distance travelled
- C.5. Cargo and passengers
- C.6. Time spent at sea

D. Data gaps

- D.1. Fuel consumption estimation
- D.2. Distance data gaps
- D.3. Cargo carried data gaps
- D.4. Time at sea data gaps

E. Management

- E.1. Regular plan check
- E.2. QA and reliability of IT
- E.3. Reviews of EU MRV data
- E.4. Corrective actions

E. Management

Preparation

Assessment

Monitoring

Reporting

Verification

01.01.2017

31.08.2017

01.01.2018

01.01.2019

30.04.2019

30.06.2019

VEGA STAR 958789

- Dashboard
- Monitoring
- Statements

Dashboard

Current voyage (16)

MONGSTAD

ATD: 25/02/2016 02:12

SKAW

ETA: 27/02/2016 02:30



State	At sea	Latest position	60°49'N 5°2'E
Distance logged	0.00	Remaining distance	359.00 nmi
Average speed	0.00	Course	-

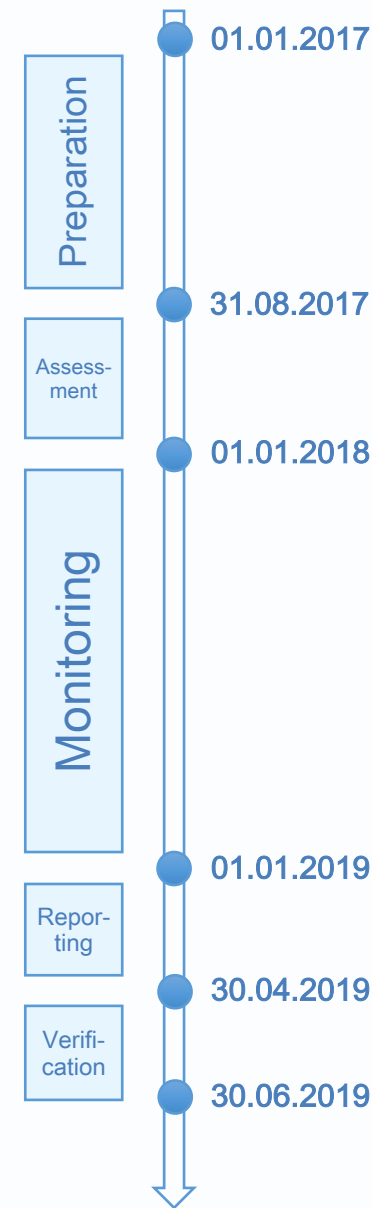
Recent statements

[See all](#)

Departure	25/02/2016 04:30	16
Unberthing	25/02/2016 02:12	16
Berthing	22/02/2016 22:42	16
Arrival	22/02/2016 18:30	16
Departure	21/02/2016 10:30	16

Recent voyages

16	25/02/2016 02:12	MONGSTAD	-	SKAW
16	21/02/2016 08:42	GOTHENBURG	22/02/2016 18:30	MONGSTAD
16	15/02/2016 03:54	ROTTERDAM	17/02/2016 12:00	GOTHENBURG
15	04/02/2016 02:30	TENERIFE	10/02/2016 12:30	ROTTERDAM
15	24/01/2016 18:30	SALVADOR	03/02/2016 16:30	TENERIFE



LIVE EXAMPLE – DATA COLLECTION, VESSEL TOOL

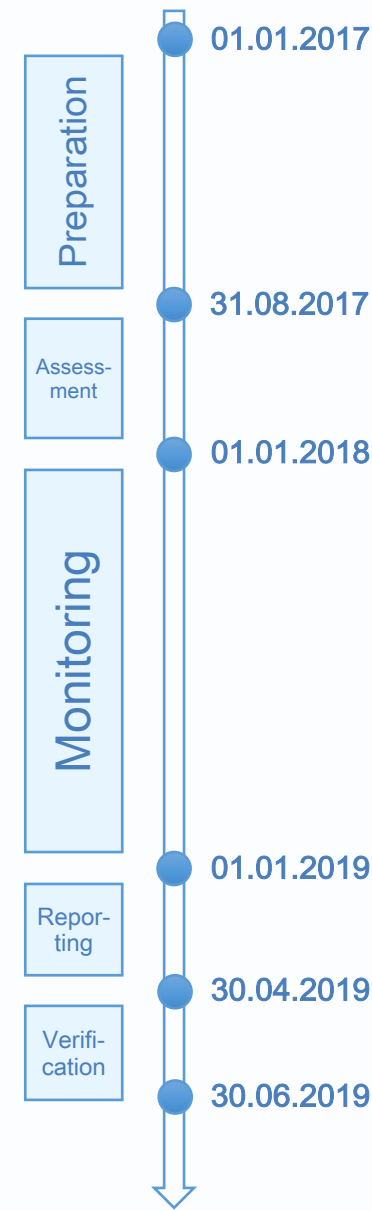
VEGA STAR 958789

Monitoring

Statements

Type	Effective date, UTC	Official date, UTC ↓	Voyage	Vessel	Operator	Created	Signed, UTC	Status
<input type="checkbox"/> Departure	24/02/2016 21:30	24/02/2016 21:30	16	VEGA STAR	Polar Operations	15/12/2016 04:05	16/01/2017 07:09	Valid
<input type="checkbox"/> Unberthing	24/02/2016 19:12	24/02/2016 19:12	16	VEGA STAR	Polar Operations	15/12/2016 03:55	16/01/2017 07:03	Valid
<input type="checkbox"/> Berthing	22/02/2016 15:42	22/02/2016 15:42	16	VEGA STAR	Polar Operations	15/12/2016 03:53	16/01/2017 07:02	Valid
<input type="checkbox"/> Arrival	22/02/2016 11:30	22/02/2016 11:30	16	VEGA STAR	Polar Operations	15/12/2016 03:48	16/01/2017 07:02	Valid
<input type="checkbox"/> Departure	21/02/2016 03:30	21/02/2016 03:30	16	VEGA STAR	Polar Operations	15/12/2016 03:42	16/01/2017 07:00	Valid
<input type="checkbox"/> Unberthing	21/02/2016 01:42	21/02/2016 01:42	16	VEGA STAR	Polar Operations	15/12/2016 03:33	16/01/2017 07:00	Valid
<input type="checkbox"/> Berthing	19/02/2016 13:42	19/02/2016 13:42	16	VEGA STAR	Polar Operations	15/12/2016 03:28	16/01/2017 06:59	Valid
<input type="checkbox"/> Arrival	17/02/2016 05:00	17/02/2016 05:00	16	VEGA STAR	Polar Operations	15/12/2016 03:28	16/01/2017 06:59	Valid

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Import port calls

Import settings

Fields delimiter: * Semicolon Date format: * 21/03/2017 14:13

Selected settings preview

```
vsIMO;depLocode;unbrtnTimeUtc;voyID
9898989;NLRTM;02/01/2016 13:45:07S
9898989;DEBRV;04/01/2016 02:45:07S
```

Csv file for import

Click Import to proceed 'Athena 2016-ST.csv' or select/drop another file here

Fuel types **Cargo units**

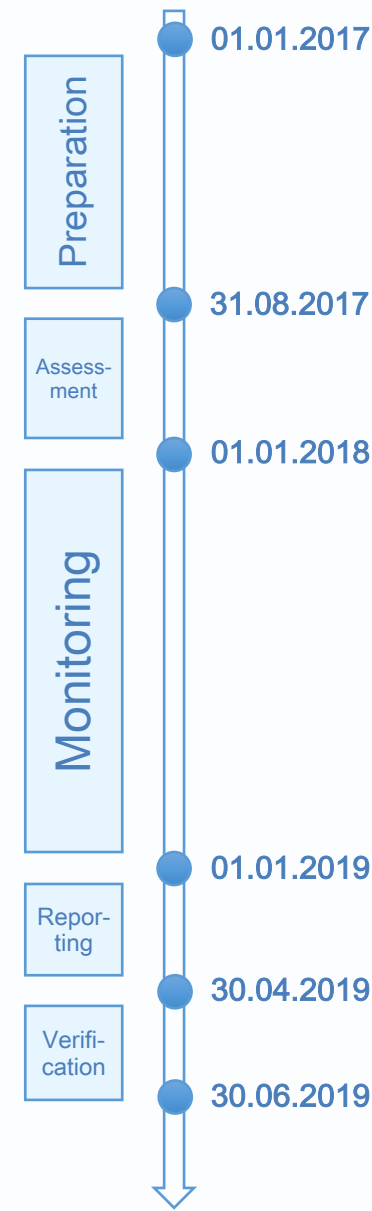
MGO Diesel/Gas oil Psng Select a unit...

HFO Select a fuel type...

ULSFO Select a fuel type...

! Found 352 port calls from 03/01/2016 18:40 till 31/12/2016 11:05 for vessel 'Athena Seaways'. Database already contains 352 port calls for same time frame.

Import
Cancel



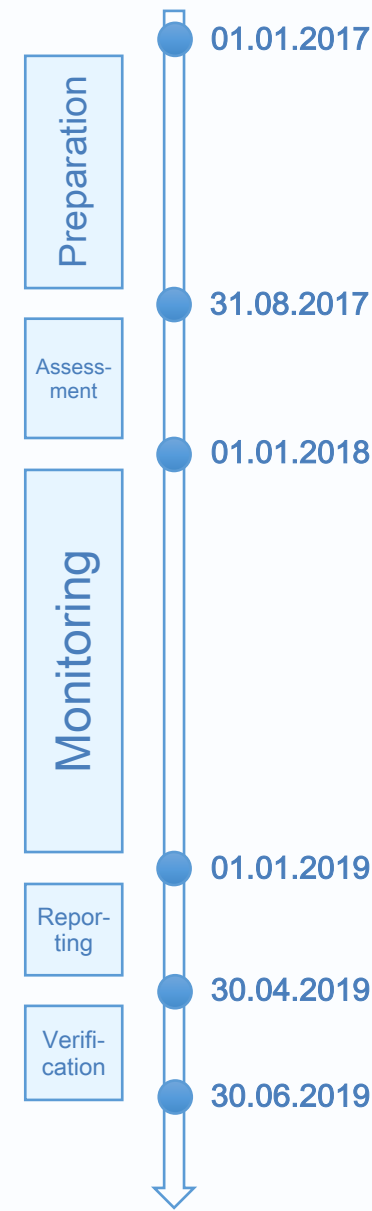
Monitoring

Port calls

↻ 🖨 📄 📤

Vessel				Departure		Arrival		Distance logged, nmi	Distance observed, nmi	Ar
IMO #	Name	Voyage	Cargo operations	Port	Departure, UTC	Port	Arrival, UTC			
<input type="text"/>	<input type="text" value="Athe"/>	<input type="text"/>	All	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9350680	Athena Seaways	ATHS-000023	✓	KLAIPEDA (LTKLJ)	23/01/2016 22:50	KARLSHAMN (SEKAN)	24/01/2016 11:55	none	220.8	
9350680	Athena Seaways	ATHS-000025	✓	KARLSHAMN (SEKAN)	24/01/2016 21:40	KLAIPEDA (LTKLJ)	25/01/2016 11:05	none	220.8	
9350680	Athena Seaways	ATHS-000027	✓	KLAIPEDA (LTKLJ)	25/01/2016 23:00	KARLSHAMN (SEKAN)	26/01/2016 11:55	none	220.9	
9350680	Athena Seaways	ATHS-000029	✓	KARLSHAMN (SEKAN)	26/01/2016 22:15	KLAIPEDA (LTKLJ)	27/01/2016 11:00	none	220.9	
9350680	Athena Seaways	ATHS-000031	✓	KLAIPEDA (LTKLJ)	27/01/2016 23:00	KARLSHAMN (SEKAN)	28/01/2016 12:05	none	222.1	
9350680	Athena Seaways	ATHS-000033	✓	KARLSHAMN (SEKAN)	28/01/2016 23:40	KLAIPEDA (LTKLJ)	29/01/2016 10:55	none	220.7	

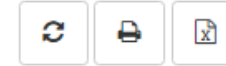
Novoprof IMRV Service © 2016–2017 Novoprof B.V. All rights reserved. Build: 2017-03-17 12:51:5



- Dashboard
- Monitoring
 - Statements
 - Port calls
- Verification
 - Monitoring plans
- Reporting
 - Interim
 - Final New

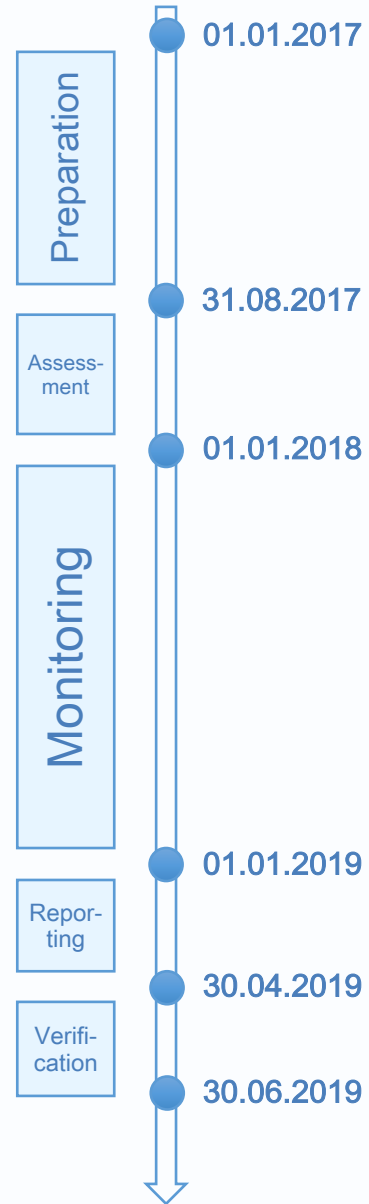
Reporting

Final reports



Vessel ↑	Year	EU port calls	Status	Verifier	Submitted	Approved	
SPACE LINES1	2016	285	Feedback	Space Verifier Company	09/03/2017 12:51		⋮
SSI Alphard	2017	2	Verification	Space Verifier Company	09/03/2017 11:19		⋮
SSI Regulus	2017	1	Approved	Space Verifier Company	01/03/2017 15:14	01/03/2017 15:16	⋮

1 - 3 of 3 items



Reporting / Final

2016 SPACE LINES1 (9399489)

[+ Add event/Change status](#) [Submit to verifier](#) [Details](#)

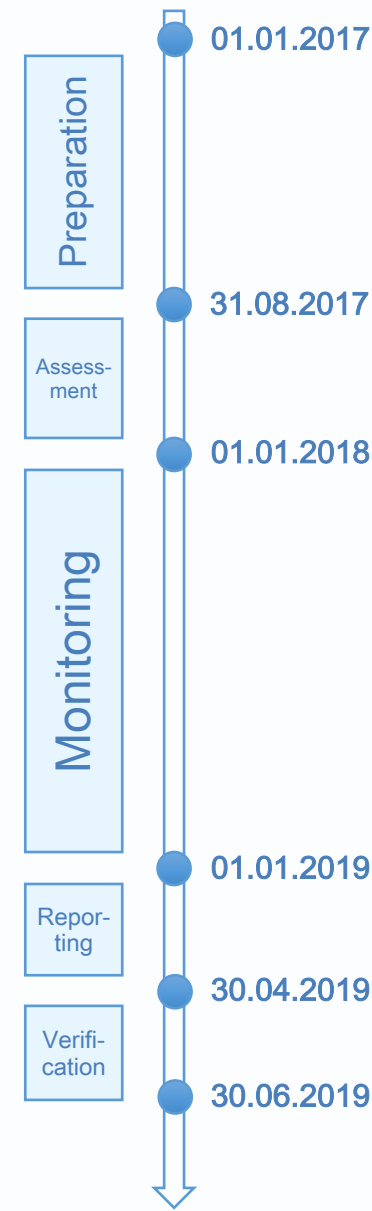
Draft Verification **Feedback** Approved

Verifier
Space Verifier Company

Status
Created: 07/03/2017 18:40 by space_shipping_inc
Updated: 09/03/2017 12:55 by space_verifier
Submitted: 09/03/2017 12:51 by space_shipping_inc

Events

- Feedback** 09/03/2017 12:55 by space_verifier
Dear John. In general it looks good. Could you please provide us the details of the voyage departed Feb 05 from Stockholm, we would like to make random check of the data?
- Verification** 09/03/2017 12:51 by space_shipping_inc
Hi! Please make an assessment of this emission report. For additional information please see the explanatory notes attached.
 - [Explanatory notes.pdf](#)



LIVE EXAMPLE – EMISSION REPORT DETAILS

Reporting / Interim

2016 Athena Seaways (9350680)

Annual monitoring results

Type of fuel	Amount, t	CO ₂ emission factor, t CO ₂ /t	Total emission, t CO ₂
Diesel/Gas oil	874.95	3.2060	2805.090
Heavy fuel oil (HFO)	15669.65	3.1140	48795.290
Light fuel oil (LFO)	1562.83	3.1510	4924.477

FUEL CONSUMPTION AND CO₂ EMITTED

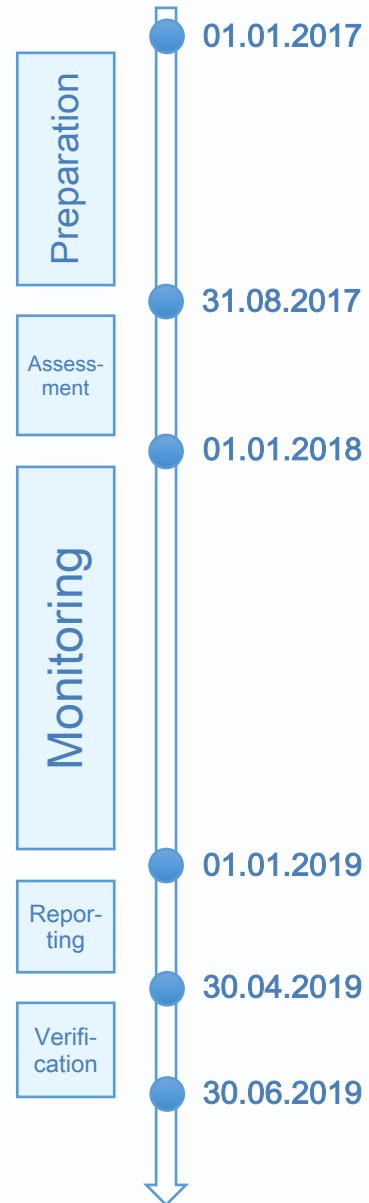
Total aggregated CO ₂ emitted	56,524.857 t		
Aggregated CO ₂ emission from all voyages between ports under Member State's jurisdiction	53,822.992 t		
Aggregated CO ₂ emission from all voyages departed from ports under Member State's jurisdiction	0.000 t		
Aggregated CO ₂ emission from all voyages to ports under Member State's jurisdiction	0.000 t		
CO ₂ emissions which occurred within ports under Member State's jurisdiction at berth	2,701.865 t		
Total Consumption		Total Emission	
Assigned to Mass	11,950.904 t	37,306.406 t CO ₂	
Assigned to No. of passengers	6,156.526 t	19,218.451 t CO ₂	

DISTANCE TRAVELLED, TIME SPENT AT SEA AND TRANSPORT WORK

Total distance travelled	116,688.2 nmi
Total time spent at sea	6,013 h
Transport work	328,052,162.28 MT·nmi
	10,399,730.90 passengers·nmi

ENERGY EFFICIENCY

	Consumption	Emission
Per distance	155.18 kg/nmi	484.41 kg CO ₂ /nmi



LIVE EXAMPLE – EMISSION REPORT DETAILS

Reporting / Interim

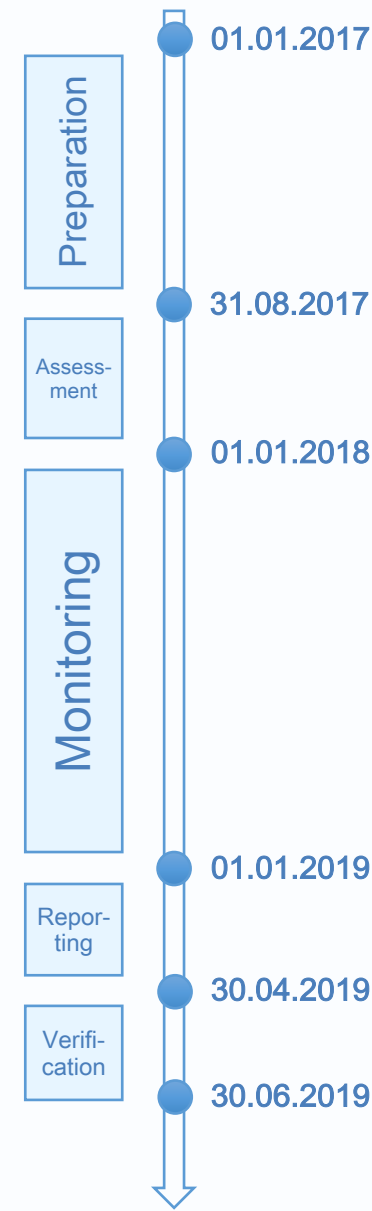
2016 Athena Seaways (9350680)

ENERGY EFFICIENCY	Consumption	Emission
Per distance	155.18 kg/nmi	484.41 kg CO ₂ /nmi
Per transport work	36.43 g/(MT·nmi)	113.72 g CO ₂ /(MT·nmi)
	591.99 g/(passengers·nmi)	1,847.98 g CO ₂ /(passengers·nmi)

Voyages

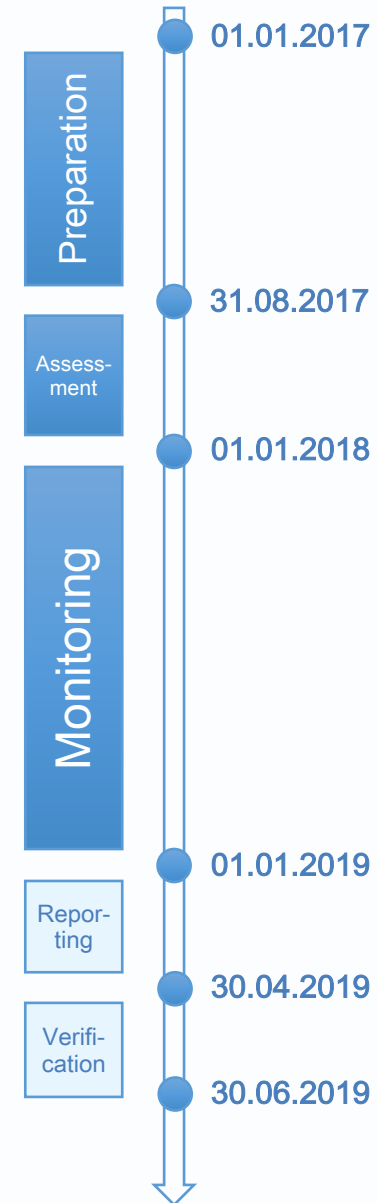
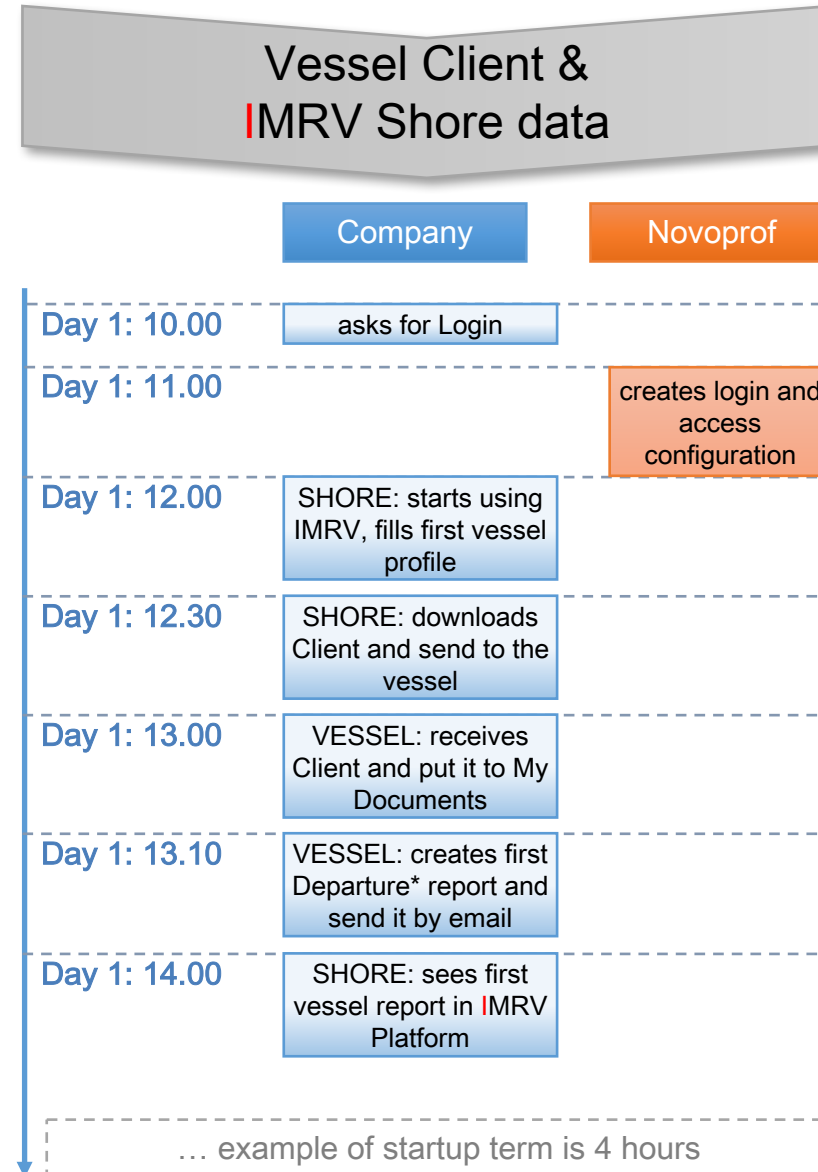
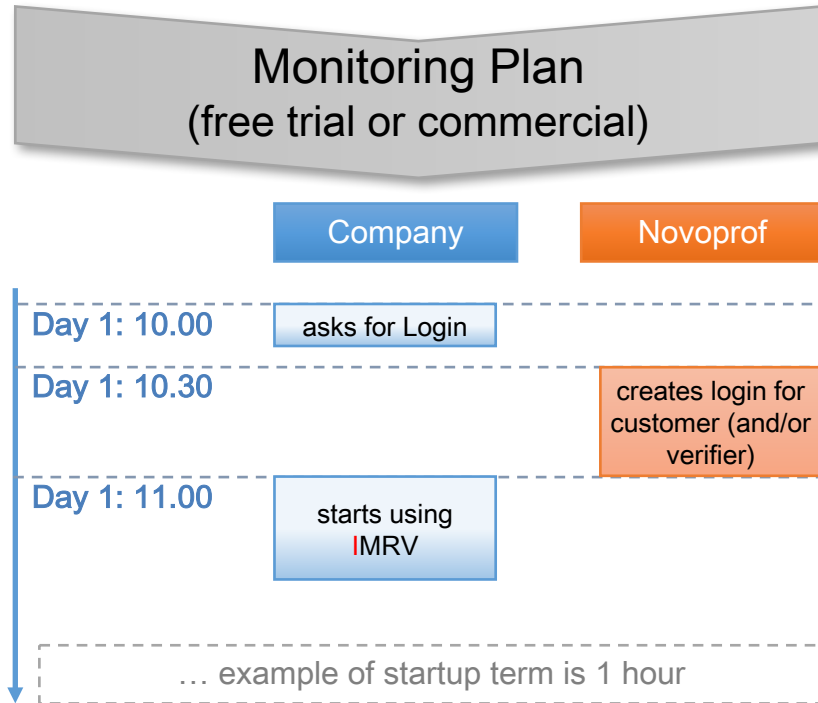
Departure			Arrival			Diesel/Gas oil		Heavy fuel oil (HFO)		Light fuel oil (
Port	Country	Date and Time, UTC	Port	Country	Date and Time, UTC	t fuel	t CO ₂	t fuel	t CO ₂	t fuel
KLAIPEDA	LT	03/01/2016 18:40	KARLSHA...	SE	14/01/2016 11:55	86.52	277.383	253.49	789.368	
KARLSHA...	SE	14/01/2016 17:50	KLAIPEDA	LT	15/01/2016 07:05	13.98	44.820	24.57	76.511	
KLAIPEDA	LT	15/01/2016 19:00	KARLSHA...	SE	16/01/2016 07:55	13.04	41.806	23.38	72.805	
KARLSHA...	SE	16/01/2016 18:00	KLAIPEDA	LT	17/01/2016 07:05	6.29	20.166	22.98	71.560	
KLAIPEDA	LT	17/01/2016 23:00	KARLSHA...	SE	18/01/2016 11:55	6.81	21.833	25.37	79.002	
KARLSHA...	SE	18/01/2016 21:55	KLAIPEDA	LT	19/01/2016 11:10	7.03	22.538	22.68	70.626	
KLAIPEDA	LT	19/01/2016 23:15	KARLSHA...	SE	20/01/2016 11:55	6.83	21.897	27.85	86.725	
KARLSHA...	SE	20/01/2016 22:00	KLAIPEDA	LT	21/01/2016 11:15	7.23	23.179	22.88	71.248	
KLAIPEDA	LT	21/01/2016 22:55	KARLSHA...	SE	22/01/2016 11:55	7.11	22.795	24.77	77.134	
KARLSHA...	SE	22/01/2016 21:55	KLAIPEDA	LT	23/01/2016 11:00	7.47	23.949	22.38	69.691	

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Per distance 155.18 kg/nmi 484.41 kg CO₂/nmi

HOW TO START NOW WITH IMRV



Data Transfer from a Corporate data collection system

- Make gap analysis of required IMRV data elements, once, Novoprof is able to assist
- On demand - enhance corporate data by discovered missing elements, once, Novoprof is able to advise
- Choose between data sets to extract for transferring to IMRV:
 - “Classic” voyage leg data [departure and arrival timing, ports, ROB, lifted, cargo total, etc ...]
 - “Aggregated” voyage leg data [departure and arrival port and timing; sea total figures; arrival port total figures]

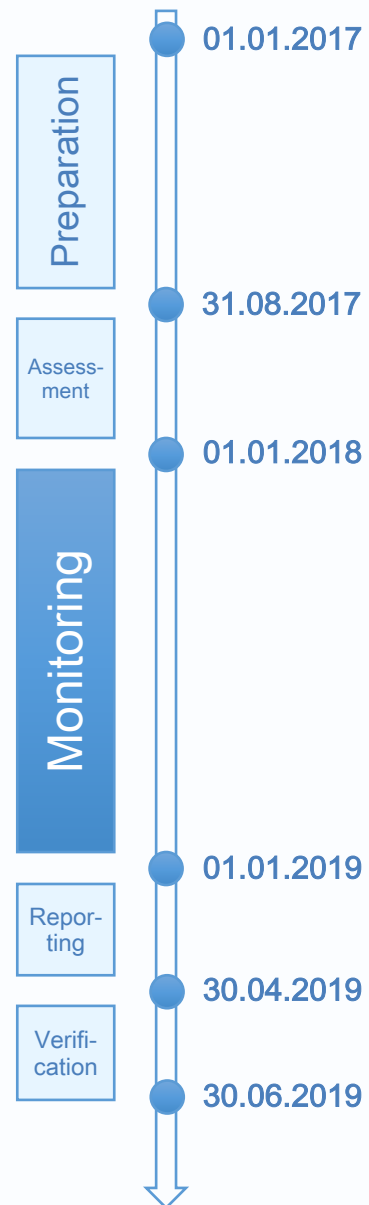
Transfer Data into IMRV via direct data channel:

- Start to support secured Web API of IMRV, once
- Establish regular automatic data transfer via Web API

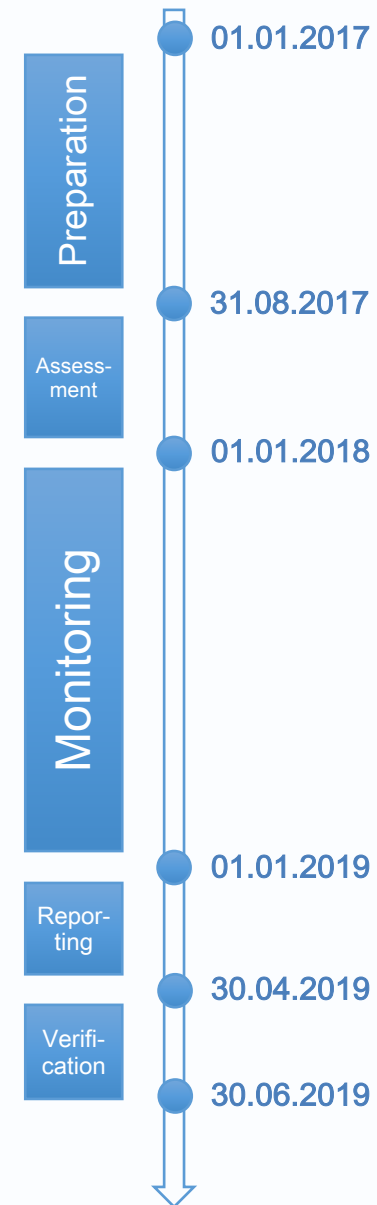
Transfer Data into IMRV via file upload:

- Arrange extract of fixed structure of voyage legs into XLS/CSV file, once
- Extract data on demand, monthly or else frequency. Upload a file into IMRV

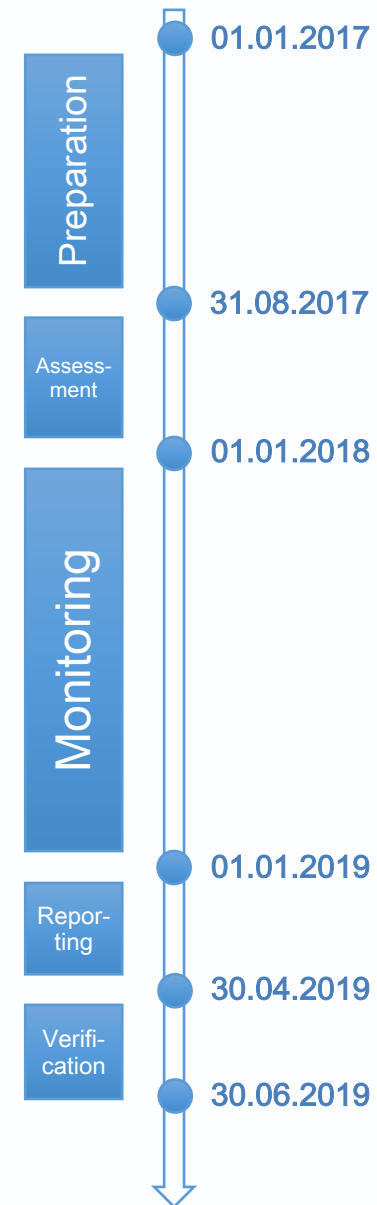
Emission Report generation, verification & Transfer to EU



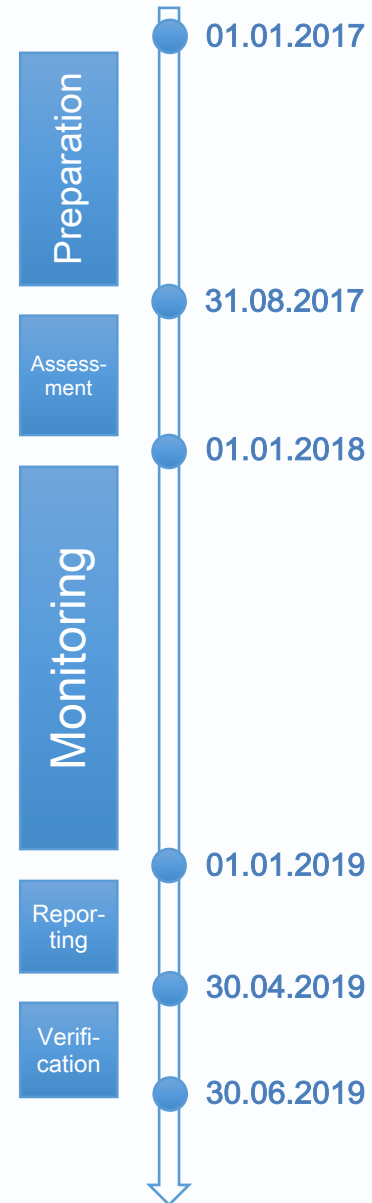
- **IMRV** Service of gap analysis against the requirements set out in the EU Regulations 2015/757
 - data availability and necessary actions on IT level
 - data collection ways
- Assistance with Monitoring plan about the content and supplementary info
- **IMRV** Service of custom integration of **IMRV** with existent in-house solutions of the company
- Analysis of business processes and custom software automation, it can be related to **IMRV** or go beyond



- In June 2017 - IT outsourcing from Rotterdam Office
- The team - long term development and support of various local and global custom corporate solutions requested and driven by shipping companies as from 2001 till now
- IT vendor provided full-cycle development service of corporate in-house MRV solution and vessel data collection tools for enterprise shipping customer at 2010x
- Performs IT automation of business processes also in container leasing area, financial domain area
- Supplies analysis of corporate IT data flows and of existing software solutions for optimization purposes and data efficiency



- **IMRV** provides full cycle of the EU MRV related workflows
- **IMRV** is easy to start with and to use
- **IMRV** has very economic prices and flexible packages
- **IMRV** supplies more than just MRV reporting, will support IMO MRV
- **IMRV** is available to try in full function for free now
- **IMRV** has been assessed by Lloyd's Register against EU Regulation 2015/757 in accordance with the intent and principles set out in the requirements of the MRV regulation





Thank you

Get in touch with the Novoprof team.
Try Novoprof IMRV now for free!

Novoprof B.V.

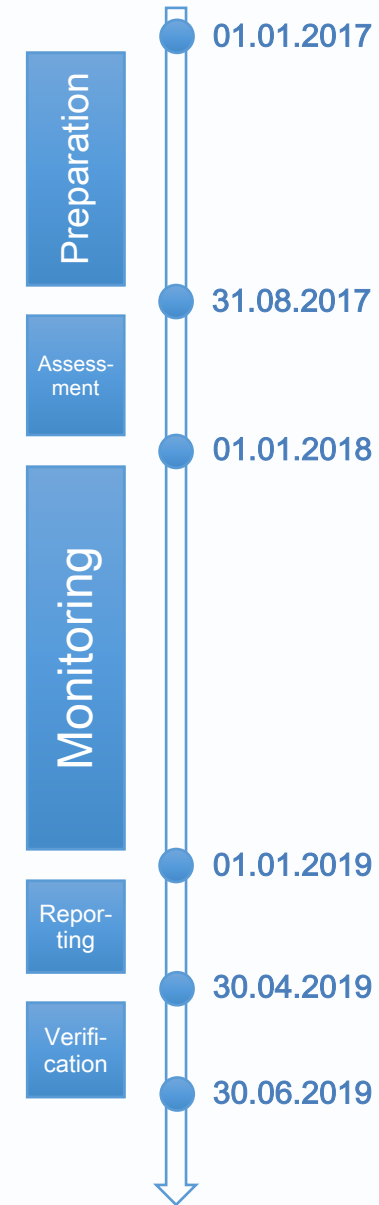
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www.imrv.eu

May 2017



EU MRV
Regulation 2015/757