Data Quality Correction Manual for Daily Report 3 Users

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Information

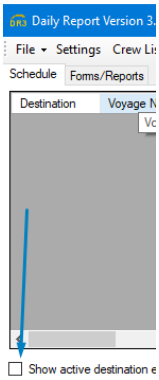
Dear **Daily Report 3** users, this Data Quality Correction Manual is prepared to clarify the warning reports that you receive. We wanted to cover almost all warnings' solutions together with their root causes. If you cannot find the solution within this manual or have questions to ask, please do not hesitate to contact us at support@herberg-systems.com

We always appreciate your precious contributions to make digitalization better for all of us.

How and when do you receive data quality reports?

There are two types of messages, these are:
WARNING MESSAGES are generated when there is missing info or abnormality regarding the quantities/distances etc.
ERROR MESSAGES are generated when there is a clear error or lack of entry.

How can you correct your entries?



You only need to correct your arrival and/or departure reports. If you want to correct your previous entries, you need to unclick "Show active destination entries only" which is located at the left bottom of the Schedule tab. Then you will be able to see old entries.

You just need to find the relevant departure or arrival report to correct it. After you change the entries, please save them. A saved modification will change the status of that entry from "Reported" to "Modified". That means the modifications that you made will be reported to our servers when you send them.

After you correct your entries in the right way, warnings or errors become rectified and you won't receive further warnings or errors relevant to corrected entries.

Small tips for better data quality

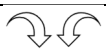
We strongly recommend reporting all the events together with their activities (loading, discharging, bunkering, etc.). When you skip reporting events especially laybys, canal anchorages, etc. you create an information gap between your tracking and reports. Another important tip that may help is to check our Daily Report 3 manual. You can open it when you click **Help**. You may improve the consistency of your reports via checking the errors and warnings as well.

Most of the time, warnings appear because of small typos. So, double-checking the entries before sending them may help a lot.

Reports are filled for **past events**. Therefore, please **do not enter an Anchorage as a Harbour or a Harbour as an Anchorage or a Canal as a Harbour, etc. Make sure** that your destination type and port activity **reflect the reality**.

If you have any questions to be answered, you can contact us at support@herberg-systems.com

Symbols:

	**Port**		**Repairs**
	**Anchorage**		**Awaiting**
	**Canal**		**Cleaning**
	**Bunkering**		**Underway**
	**Loading**		**Discharging**
	**Arrival Report**		**Departure Report**
	**Updated Arrival report***		**Updated Departure Report***

***In some cases, it is not possible to enter all the information once; thus, reports need to be updated. For example, the vessel anchored on arrival and FLA, All Fast, POB, FWE etc. cannot be entered because they have not occurred. They can only be entered after the vessel shifts to the port. When the vessel is alongside, the arrival report can be updated with newly occurred events.

Warning Messages

» DISTANCE_SBE_BOSP missing

EXAMPLE PORT (EX PRT)	
ETA: 28/02/2021 12:00 lt ATA: 28/02/2021 08:00 lt Voyage: 24/2021 Destination Type: HARBOUR Avg. Speed: 10.05 kn Port activities: LOADING	ETD: 15/03/2021 21:00 lt ATD: 14/03/2021 20:45 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES DEPARTURE_REPORT -> DISTANCE_SBE_BOSP missing	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 45.5 nm DISTANCE_EOSP_FWE: 18.9 nm CARGO_LOADED: 4740 mt ANCHOR_TIME: 0 hrs ROB MGOLS: 105.5 mt ROB MDO: 123.24 m	DISTANCE_SBE_BOSP: 0 nm CARGO_LOADED: 4740 mt ANCHOR_TIME: N/A hrs ROB MGOLS: 104.11 mt ROB MDO: 123.24 mt

Why does it happen?

Distance between SBE to BOSP is either didn't entered or entered as zero.

How to solve:

Distance between SBE and BOSP needs to be entered.

» DISTANCE_EOSP_FWE missing

EXAMPLE PORT (EX PRT)	
ETA: 28/02/2021 12:00 lt ATA: 28/02/2021 08:00 lt Voyage: 24/2021 Destination Type: HARBOUR Avg. Speed: 10.05 kn Port activities: DISCHARGING	ETD: 15/03/2021 21:00 lt ATD: 14/03/2021 20:45 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES ARRIVAL_REPORT -> DISTANCE_EOSP_FWE missing	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 38.4 nm DISTANCE_EOSP_FWE: 0 nm CARGO_LOADED: 4740 mt ANCHOR_TIME: 0 hrs ROB MGOLS: 103.87 mt ROB MDO: 121.15 mt	DISTANCE_SBE_BOSP: 3 nm CARGO_LOADED: 4740 mt ANCHOR_TIME: N/A hrs ROB MGOLS: 104.11 mt ROB MDO: 123.24 mt

Why does it happen?

Distance between EOSP to FWE is either did not entered or entered as zero.

How to solve:

Distance between EOSP and FWE needs to be entered.

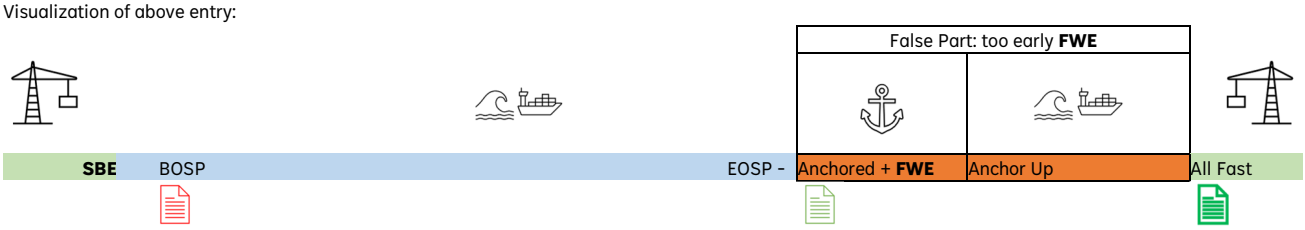
» ATA before Anchor UP & Anchorage time (xx.xx) during port stay is not considered for the voyage

EXAMPLE PORT (EX PRT)	
ETA: 14/01/2021 13:55 lt ATA: 14/01/2021 12:10 lt Voyage: 23/2020 Avg. Speed: 9.39 kn Port activities: DISCHARGING	ETD: 15/01/2021 21:00 lt ATD: 26/01/2021 20:45 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES ARRIVAL_REPORT -> ATA before anchor up, Anchorage time during port stay is not considered for the voyage ARRIVAL_REPORT -> Anchorage time (242.4) during port stay is not considered for the voyage	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 2575 nm DISTANCE_EOSP_FWE: 27 nm CARGO_LOADED: 5827 mt ANCHOR_TIME: 0 hrs ANCHOR_TIME: 0 hrs ROB MGOLS: 106.17 mt ROB MDO: 159.45 mt	DISTANCE_SBE_BOSP: 3 nm CARGO_LOADED: 5197 mt ANCHOR_TIME: N/A hrs ROB MGOLS: 104.57 mt ROB MDO: 159.45 mt

Why does it happen?

The vessel arrived at the port for discharging; however, berthing did not occur on arrival. The vessel anchored and waited for the berth. FWE entered after Anchor Down, but our data quality checks calculate a voyage leg between SBE and FWE. If there is an anchorage entry between SBE and FWE, it is automatically deducted as an anchorage entry. In this case, it did not happen because FWE entered before anchor up. This creates a long period for the voyage and your average speed and consumption reflects unreal measurements.

Visualization of above entry:

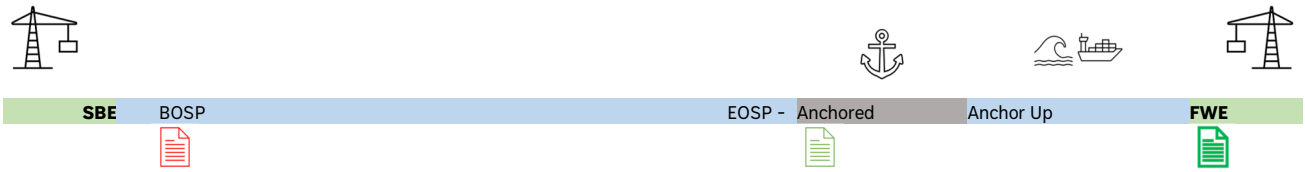


FWE entered after anchoring. This extends your calculated port time and the extension is the orange area. You can see calculated information below and false calculations marked with red.

Calculated Distance	: 2605
Calculated Time	: 12.9 Days(Error - Shifting from anchor up to all fast excluded)
Calculated Daily Fuel Consumption	: 11.15 mt (Error - FWE to all fast excluded)
Calculated Average Speed	: 9.39 kn (Error - Shifting from anchor up to all fast excluded)
Calculated Anchorage Time	: N/A because FWE to SBE calculated as **port stay**
Calculated Port Stay	: Green bar + **Orange bar(10 days more)**

How to solve:

FWE as an important entry for finishing the voyage leg. If you enter FWE at the end of the leg, Fleettracker will calculate your voyage leg correctly. Your voyage starts with your **SBE** and ends with **FWE**. The port stays calculated from **FWE** to **SBE**, and anchorage time will be deducted from SBE to FWE. Your average speed and average consumption will be correct. We check the hierarchical importance of events. EOSP<Anchor down<Anchor up<FLA<All Fast<FWE is the hierarchy, so FWE overrides all other event entries, and we can assess the actual arrival time. This is the main reason why FWE is important. Additionally, not all templates have similar events to report but they all have FWE. Please also check the below example to correct your entry:



Correct calculations if entered correctly:

Calculated Distance	: 2605
Calculated Time	: 12.9 Days + Shifting to berth
Calculated Daily Fuel Consumption	: 11.15 mt + Shifting consumption
Calculated Average Speed	: Calculated time / Calculated distance
Calculated Anchorage Time	: **242.4 hours(10 Days)**
Calculated Port Stay	: Green Bar

» Reported distance is xxxx.xx nm shorter than calculated pasttrack

EXAMPLE PORT (EX PRT)	
ETA: 14/04/2021 12:42 lt ATA: 14/04/2021 13:48 lt Voyage: 15 Avg. Speed: 2.18 kn Port activities: BUNKERING	ETD: 14/04/2021 23:30 lt ATD: 14/04/2021 22:40 lt Destination Type: ANCHORAGE Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES reported distance is 3061.99 nm shorter than calculated pasttrack	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 1569 nm DISTANCE_EOSP_FWE: 4.5 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFOULS: 224 mt ROB MGOLS: 216.46 mt	DISTANCE_BOSP_EOSP: 1569 nm DISTANCE_EOSP_FWE: 4.5 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFOULS: 224 mt ROB MGOLS: 216.46 mt

Why does it happen?

You have continuous terrestrial and/or satellite tracking with Fleettracker. This tracking option receives the vessel's position at least 12-minute intervals and calculates your distances via your previous positions. So, the reported distance is shorter than tracking between SBE and FWE.

How to solve:

Please check your entries. Did you correctly enter your SBE and FWE? Did you correctly enter the distances of your relevant Departure and Arrival Reports? If you find all your previous entries correct, please describe the situation to your company. Your company can check and help you for solving this warning.

» Reported distance is xxxx.xx nm longer than calculated pasttrack

EXAMPLE PORT (EX PRT)	
ETA: 14/04/2021 12:42 lt ATA: 14/04/2021 13:48 lt Voyage: 15 Avg. Speed: 2.18 kn Port activities: BUNKERING	ETD: 14/04/2021 23:30 lt ATD: 14/04/2021 22:40 lt Destination Type: ANCHORAGE Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES reported distance is 3061.99 nm shorter than calculated pasttrack	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 1569 nm DISTANCE_EOSP_FWE: 4.5 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFOULS: 224 mt ROB MGOLS: 216.46 mt	DISTANCE_BOSP_EOSP: 1569 nm DISTANCE_EOSP_FWE: 4.5 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFOULS: 224 mt ROB MGOLS: 216.46 mt

Why does it happen?

You have continuous terrestrial and/or satellite tracking with Fleettracker. This tracking option receives the vessel's position at least 12-minute intervals and calculates your distances via your previous positions. So, the reported distance is longer than tracking between SBE and FWE.

How to solve:

Please check your entries. Did you correctly enter your SBE and FWE? Did you correctly enter the distances of your relevant Departure and Arrival Reports? If you find all your previous entries correct, please describe the situation to your company. Your company can check and help you for solving this warning.

» Schedule entry is marked as open, but it is not the latest schedule

EXAMPLE PORT (EX PRT)	
ETA: 10/03/2021 09:00 lt ATA: N/A lt Voyage: 02/21 Avg. Speed: N/A kn Port activities: LOADING	ETD: 10/03/2021 11:00 lt ATD: N/A lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES Schedule entry is marked as open, but it is not the latest schedule	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: N/A nm DISTANCE_EOSP_FWE: N/A nm CARGO_LOADED: N/A mt ANCHOR_TIME: N/A hrs	DISTANCE_SBE_BOSP: N/A nm CARGO_LOADED: N/A mt ANCHOR_TIME: N/A hrs

Why does it happen?

Your schedule entries for future ports can exist without arrival and departure reports. Since they are for the future, it is expected to not have arrival and departure reports because those events have not happened yet. However, previous schedules are past events, and it is expected to have their arrival and departure reports.

How to solve:

In short, arrival and departure reports for the schedule were not entered. Please make sure that both the arrival report and departure report are entered correctly and click send to update servers with your changes.

» Cargo changed at sea

EXAMPLE PORT (EX PRT)	
ETA: 04/06/2021 12:01 lt ATA: 04/06/2021 13:35 lt Voyage: 25/2021 Avg. Speed: 11.32 kn Port activities: LOADING, BUNKERING	ETD: 08/06/2021 12:10 lt ATD: 07/06/2021 09:50 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES ARRIVAL_REPORT -> DISTANCE_EOSP_FWE missing	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 38.4 nm DISTANCE_EOSP_FWE: 0 nm CARGO_LOADED: 4740 mt ANCHOR_TIME: 0 hrs ROB MGOLS: 103.87 mt ROB MDO: 121.15 mt	DISTANCE_SBE_BOSP: 6 nm CARGO_LOADED: 10361 mt ANCHOR_TIME: N/A hrs ROB MGOLS: 115.8 mt ROB MDO: 298.56 mt BUNKER MGOLS: 15 mt BUNKER MDO: 240 mt

Why does it happen?

It is expected to have the same cargo quantity between a departure report and an arrival report. Cargo quantity between a departure and an arrival report can only change in special circumstances such as loss of cargo, cargo damage etc.

How to solve:

Please check both departure and arrival reports. When you find the false entry, please correct it.

» Cargo changed while dest type is not one of [HARBOUR, ANCHORAGE]

EXAMPLE PORT (EX PRT)	
ETA: 13/02/2021 16:15 lt ATA: 13/02/2021 16:15 lt Voyage: 1212019 Avg. Speed: 11.98 kn Port activities:	ETD: 16/02/2021 01:00 lt ATD: 15/02/2021 15:50 lt Destination Type: CANAL Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES DEPARTURE_REPORT -> Cargo changed while dest type is not one of [HARBOUR, ANCHORAGE]	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 856.9 nm DISTANCE_EOSP_FWE: 3.5 nm CARGO_LOADED: 8741.07 mt ANCHOR_TIME: 0 hrs ROB LFOULS: 108.7 mt ROB MGOLS: 109.3 mt	DISTANCE_SBE_BOSP: 50.8 nm CARGO_LOADED: 8969.78 mt ANCHOR_TIME: N/A hrs ROB LFOULS: 268.7 mt ROB MGOLS: 141.7 mt BUNKER LFOULS: 160.1 mt BUNKER MGOLS: 34.55 mt

Why does it happen?

There are two main reasons for that. These are wrong port activity entry and wrong destination entry. In this example, we can see both because there is no port activity entry (loading, discharging, bunkering, awaiting service, cleaning, for repairs, shipyard, for orders, purging or layup) and the type of the destination is also incorrect because canal entries are not used for discharging or loading cargo.

How to solve:

Relevant entries need to be corrected. These are destination type and port activity/ies. Please note that if you need to enter more than one activity, you can do it just by clicking the relevant boxes in your schedule entry.

» Cargo loading activity but TOTAL_CARGO_LOADED at departure is 0

EXAMPLE PORT (EX PRT)	
ETA: 25/03/2021 18:00 lt ATA: 25/03/2021 23:13 lt Voyage: 1023037 Avg. Speed: 7.03 kn Port activities: LOADING	ETD: 29/03/2021 19:00 lt ATD: 29/03/2021 18:52 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES DEPARTURE_REPORT -> Cargo loading activity but TOTAL_CARGO_LOADED at departure is 0	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 349 nm DISTANCE_EOSP_FWE: 4 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFOULS: 714.7 mt ROB MGOLS: 12.8 mt	DISTANCE_SBE_BOSP: 15 nm CARGO_LOADED: 0 mt ANCHOR_TIME: N/A hrs ROB HFOULS: 714.7 mt ROB MGOLS: 90 mt BUNKER MGOLS: 89.84 mt

Why does it happen?

Port activity is selected as loading; however, there is no loaded cargo entry.

How to solve:

Please check which part is incorrect, Port activity or loaded cargo entry? Correct wrong entry accordingly.

»» ARRIVAL_REPORT -> HFO consumption during voyage: -XXX.X mt

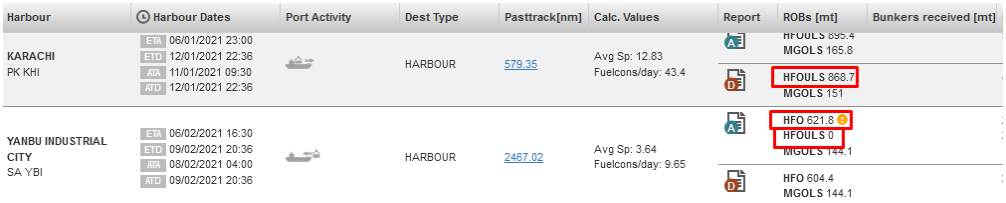
EXAMPLE PORT (EX PRT)	
ETA: 06/02/2021 16:30 lt ATA: 08/02/2021 04:00 lt Voyage: 013 Avg. Speed: 3.64 kn Port activities: LOADING	ETD: 09/02/2021 20:36 lt ATD: 09/02/2021 20:36 lt Destination Type: HARBOUR Fuelconsumption per day at sea: xx mt/day Fuelconsumption per day at harbour : xx mt/day
WARNING MESSAGES ARRIVAL_REPORT -> HFO consumption during voyage: -621.8 mt	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 2293 nm DISTANCE_EOSP_FWE: 2.88 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 0 hrs ROB HFO: 621.8 ROB HFOULS: 0 mt ROB MGOLS: 144.1 mt	DISTANCE_SBE_BOSP: 28 nm CARGO_LOADED: 54466 mt ANCHOR_TIME: N/A hrs ROB HFO: 604.4 mt ROB MGOLS: 144.1 mt

Why does it happen?

There can be two main reasons for this warning. Either there was a typo when entering ROBs or the vessel changed fuel type, but some details are missing.

- **Typo:** An arrival reports ROB for a fuel type can't be more than the previous port's ROB, unless there is bunkering. ROB of a fuel type, for example, fuel oil can be the same within SECA for some vessels because they don't use it. However, it can't be more than the previous departure report, if tere is no bunkering in between. Sometimes different decimals between reports or typos cause this warning.

- **Bunker type change:** Vessel changed fuel type; however, HFO was zero before. Then it became 621.8 mts suddenly without bunkering entry. It creates warning when there was an increase in ROBs without a bunkering entry.



How to solve:

Please check your reports for a decimal difference or a typo.

This example is caused by the second option. The vessel changed the fuel type but didn't enter a minus bunkering information. Then it appeared as huge consumption of old fuel type and bunkering without a BDN.

If you changed the bunker type on board or want to change it, please use minus bunkering (bunker discharged) for the old fuel type and bunkering (bunker received) to the new fuel type. For this case, it is needed to add -621.8 mts HFOULS and +621,8 mts HFO bunkerings. With that way, it is easily trackable that you changed the fuel type on board.

» Total fuel cons. per day differs from annual median

EXAMPLE PORT (EX PRT)	
ETA: 10/07/2022 22:50 lt ATA: 11/07/2022 06:07 lt Voyage: 150001007 Avg. Speed: 12.23 kn Port activities: BUNKERING	ETD: 11/07/2022 06:06 lt ATD: 11/07/2022 06:07 lt Destination Type: HARBOUR Avg. Speed: 12.23 kn Fuelconsumption per day at sea: 13.64 mt/day Fuelconsumption per day at harbour : 35337.6 mt/day
WARNING MESSAGES Total fuel cons. per day differs from annual median (3.4 mt) by 1043128%, total fuel cons: 0.8 mt in 0.000 days	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 922.7 nm DISTANCE_EOSP_FWE: 11 nm CARGO_LOADED: 6976.1 mt ANCHOR_TIME: 7.28 hrs ROB LFOULS: 4.7 mt ROB MGOLS: 130.8 mt	DISTANCE_SBE_BOSP: 11.2 nm CARGO_LOADED: 7253.4 mt ANCHOR_TIME: N/A hrs ROB LFOULS: 444.72 mt ROB MGOLS: 217 mt BUNKER LFOULS: 440.02 mt BUNKER MGOLS: 87.02 mt

Why does it happen?

This value is automatically calculated and shows the consumption in port for 24 consequtive hours. It can result from either simply a typo or sometimes also due to a very short port stay.

Occaisionally something else would explain a relatively larges consumption, e.g. use of vessels cranes or discharge pumps on tankers.

How to solve:

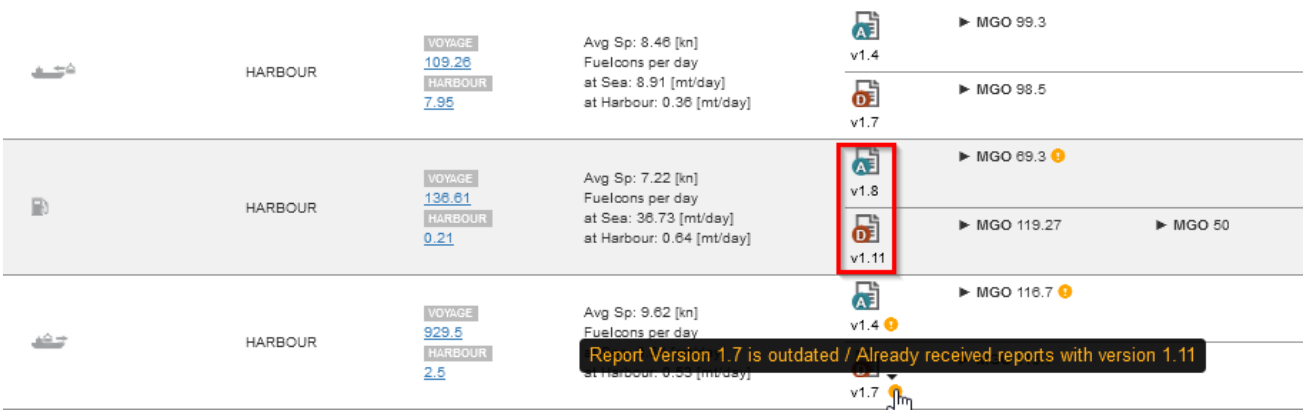
Recheck all dates, times, rob bunker figures in the arrival and departure report. Correct where necessary and if figures found to be correct contact your fleettracker admin or Heberg System support and the warning mssage can be acknowledged.

» Report Version x.x is outdated / Already received reports with version x.x

WARRENPOINT (GB WPT)	
ETA: 28/05/2023 23:40 lt ATA: 29/05/2023 09:45 lt Voyage: 16/2023 Avg. Speed: 9.62 kn Port activities: DISCHARGING	ETD: 31/05/2023 09:00 lt ATD: 31/05/2023 06:45 lt Destination Type: HARBOUR Fuelconsumption per day at sea: 0.64 mt/day Fuelconsumption per day at harbour : 0.53 mt/day
WARNING MESSAGES Report Version 1.4 is outdated / Already received reports with version 1.8 Report Version 1.7 is outdated / Already received reports with version 1.11	

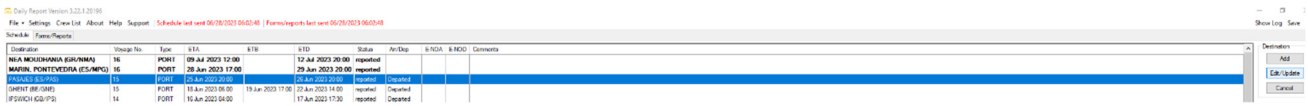
Whay does it happen?

When the Templates have recently been updated and either a forgotten entry had been inserted at a later stage, or a past reports had been upgraded. As shown in the screenshot below the template versions in the red frame have higher version numbers than the following reports below.

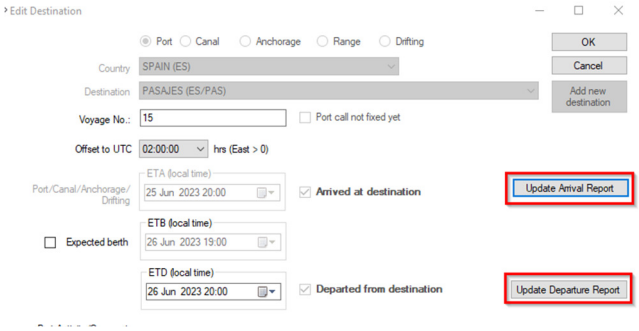


How to solve:

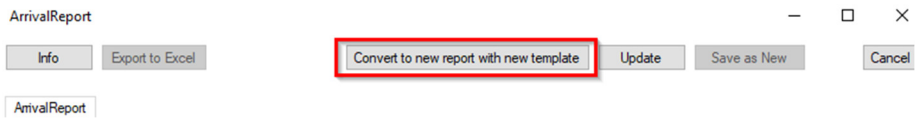
1. To edit the destination double click on the schedule entry in which you would like to convert the report.



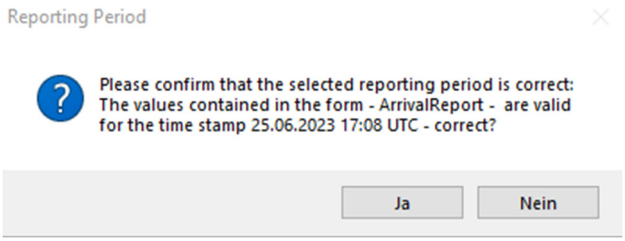
2. Click on "Update Arrival Report and/or "Update Departure Report"



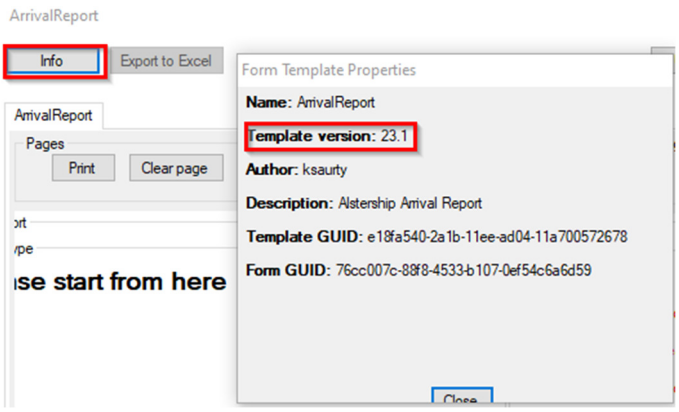
3. Click on the button "Convert to new report with new template" to upgrade the template version number.



4. Check if the reporting period is correct.



5. By clicking on the "Info" button you can check the template version.



6. **IMPORTANT** When you have converted a past arrival and/or departure report you need to convert ALL other following arrival and departure reports as well! Otherwise the version number will be inconsistent and this will generate a warning in the data quality section.

Error Messages

» TOTALCARGO_FWE (xxxxx) is bigger than DEADWEIGHT_FWE (xxxx)

EXAMPLE PORT (EX PRT)	
ETA: 09/06/2021 08:00 lt ATA: 10/06/2021 05:36 lt Voyage: 501010 Avg. Speed: 12.19 kn Port activities: FOR_REPAIRS	ETD: 10/06/2021 17:00 lt ATD: 11/06/2021 16:40 lt Destination Type: HARBOUR Fuelcons/day: 10.64 mt
ERROR MESSAGES ARRIVAL_REPORT -> TOTALCARGO_FWE (881575) is bigger than DEADWEIGHT_FWE (6676.2) ARRIVAL_REPORT -> TOTALCARGO_FWE (881575) is bigger than DEADWEIGHT_FWE (6676.2)	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 3203 nm DISTANCE_EOSP_FWE: 261.5 nm CARGO_LOADED: 6676.2 mt ANCHOR_TIME: 0 hrs ROB LFOULS: 193.5 mt ROB MGOLS: 36.2 mt	DISTANCE_SBE_BOSP: 2 nm CARGO_LOADED: 6676.2 mt ANCHOR_TIME: N/A hrs ROB LFOULS: 193.5 mt ROB MGOLS: 140.3 mt BUNKER MGOLS: 104.88 mt

Why does it happen?

There is an inconsistency between the entered data. Either DWT or Cargo or both of them are incorrect.

How to solve:

Please make sure that relevant entries are corrected. It will be helpful to check other related information as well.

» Arrival date is not before departure date

EXAMPLE PORT (EX PRT)	
ETA: 09/06/2021 08:00 lt ATA: 11/06/2021 05:36 lt Voyage: 501010 Avg. Speed: 12.19 kn Port activities: FOR_REPAIRS	ETD: 10/06/2021 17:00 lt ATD: 10/06/2021 16:40 lt Destination Type: HARBOUR Fuelcons/day: 10.64 mt
ERROR MESSAGES ARRIVAL_REPORT -> Arrival date is not before departure date DEPARTURE_REPORT -> Arrival date is not before departure date	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 3203 nm DISTANCE_EOSP_FWE: 261.5 nm CARGO_LOADED: 6676.2 mt ANCHOR_TIME: 0 hrs ROB LFOULS: 193.5 mt ROB MGOLS: 36.2 mt	DISTANCE_SBE_BOSP: 2 nm CARGO_LOADED: 6676.2 mt ANCHOR_TIME: N/A hrs ROB LFOULS: 193.5 mt ROB MGOLS: 140.3 mt BUNKER MGOLS: 104.88 mt

Why does it happen?

There is a mistake which is highlighted with yellow on the above example table. The arrival date shall not be later than the departure date.

How to solve:

It can be a typo or another mistake, please correct the false entry. The arrival date shall be before than departure date.

» When ARRIVED_ANCHORAGE is set, DEPARTED_ANCHORAGE cannot be empty

EXAMPLE PORT (EX PRT)	
ETA: 28/02/2021 12:00 lt ATA: 28/02/2021 08:00 lt Voyage: 24/2021 Destination Type: HARBOUR Avg. Speed: 10.05 kn Port activities: LOADING	ETD: 15/03/2021 21:00 lt ATD: 14/03/2021 20:45 lt Destination Type: HARBOUR Fuelcons/day: 11.15 mt
ERROR MESSAGES ARRIVAL_REPORT -> When ARRIVED_ANCHORAGE is set, DEPARTED_ANCHORAGE cannot be empty	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 360 nm DISTANCE_EOSP_FWE: 72 nm CARGO_LOADED: 10473.2 mt ANCHOR_TIME: 0 hrs ROB MGOLS: 113.49 mt ROB MDO: 253.68 mt	DISTANCE_SBE_BOSP: 35 nm CARGO_LOADED: 10473.2 mt ANCHOR_TIME: N/A hrs ROB MGOLS: 113.06 mt ROB MDO: 253.68 mt

Why does it happen?

If there is an anchor down entry, there must be an anchor up entry as well. This makes two possibilities to consider. Did vessel anchor or not?

How to solve:

If the vessel is anchored, then anchor times need to be entered totally. If the vessel didn't anchor, then the false entry for anchoring needs to be deleted.

» VOYAGE_LEG_FROM_PREVIOUS_SCHEDULE_TO_CURRENT -> Negative Value

EXAMPLE PORT (EX PRT)	
ETA: 11/04/2021 17:00 lt ATA: 12/04/2021 21:42 lt Voyage: 014 Avg. Speed: 11.81 kn Port activities: LOADING	ETD: 14/04/2021 09:00 lt ATD: 14/04/2021 08:12 lt Destination Type: HARBOUR Fuelcons/day: -44.56 mt
ERROR MESSAGES VOYAGE_LEG_FROM_PREVIOUS_SCHEDULE_TO_CURRENT -> Negative Value WARNING MESSAGES ARRIVAL_REPORT -> HFO consumption during voyage: -329.8 mt ARRIVAL_REPORT -> MGOLS consumption during voyage: -119.3 mt	
Arrival Report	**Departure Report**
DISTANCE_BOSP_EOSP: 2839 nm DISTANCE_EOSP_FWE: 12 nm CARGO_LOADED: 0 mt ANCHOR_TIME: 24.3 hrs ROB HFO: 1269.1 mt ROB MGOLS: 318 mt	DISTANCE_SBE_BOSP: 8 nm CARGO_LOADED: 55413.6 mt ANCHOR_TIME: N/A hrs ROB HFO: 1255.2 mt ROB MGOLS: 318 mt

Why does it happen?

Previous departure reports ROBs are 939.3 mt HFO and 318 mt MGOLS. So, there is a ROB increase without bunkering entry. There must be a Bunkering entry if there is a ROB increase. As a result of this negative consumption appears as an error.

How to solve:

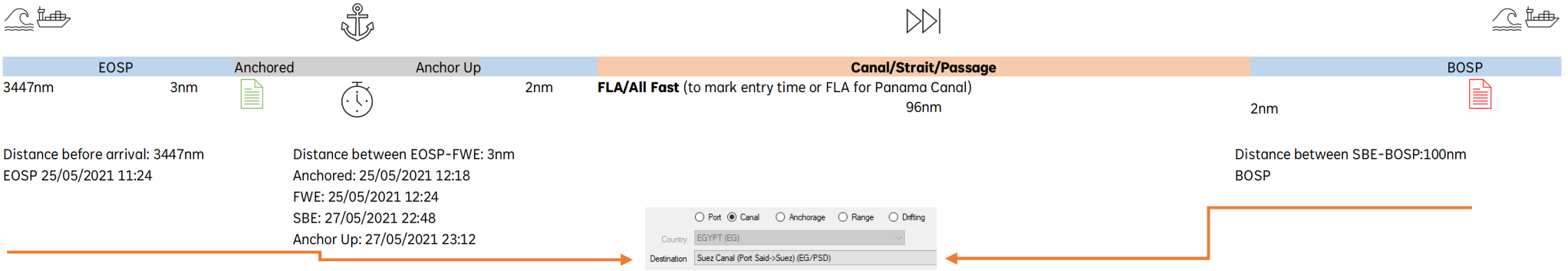
Please check your records. If there were bunkering needs to be entered, please enter it to the relevant place. If you realize that there was no bunkering and you entered the wrong ROBs, please correct them.

HOW TOs

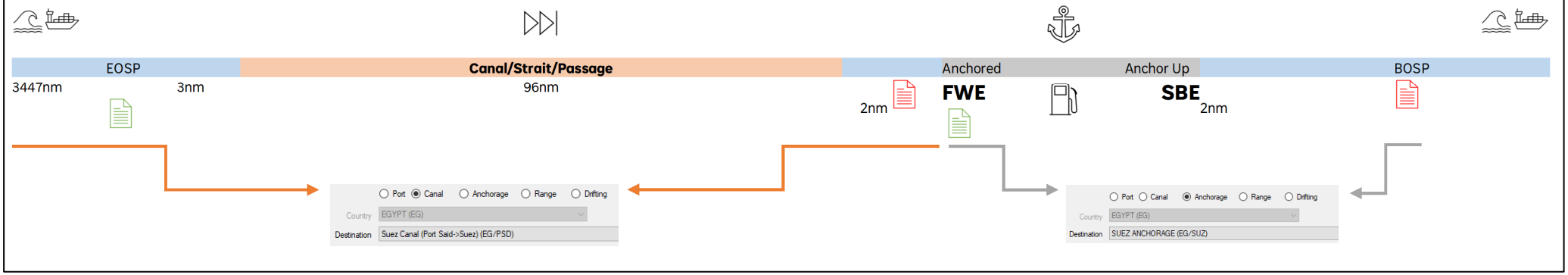
How to enter canals/straits/passages?

In this part, you can find canal/strait /passage entries. We tried to cover all the anchoring possibilities to describe the reporting concept. The main difference is that there is no FWE and SBE requirement for canals. We calculate canal anchorages and consumptions with the help of **FLA** or **All Fast**. If you anchored before the canal, we consider your anchor and anchor up times as FWE and SBE. Therefore, we request not to enter FWE and SBE. These are anchorage before, anchorage after, anchorage before and after them. You may see that bunkering at anchorages which are optional to show the possibilities of the entries.

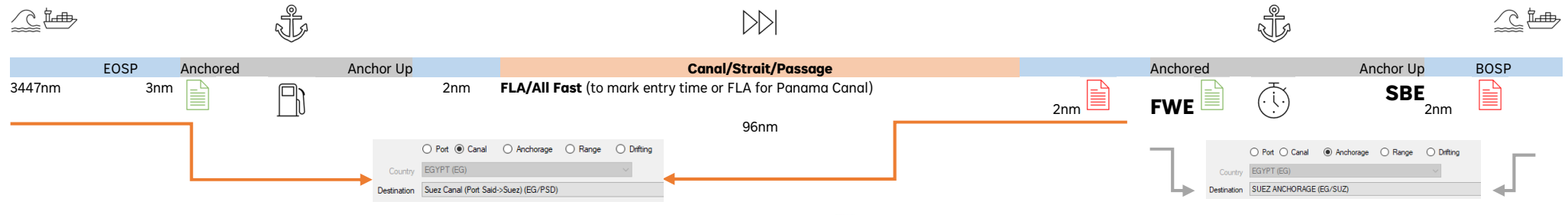
Anchorage **before** canal/strait/passage **(No FWE & SBE)**



Anchorage **after** canal/strait/passage **(No FWE & SBE for the first Canal schedule only)**



Anchorage **before and after** canal/strait /passages **(No FWE & SBE for the first Canal schedule only)**



How to enter bunkering?

Below is an extreme example of bunkering which covers all the bunkering possibilities. The vessel arrives and takes bunkers before berthing (Bunkering between EOSP-FWE). Then vessel berths and bunkers again at berth (Bunkering between FWE – SBE). Finally, the vessel departs from the port but again bunkers right after departure (Bunkering between SBE – BOSP). There is also a sample arrival and departure report visible below. You can enter in the same way into your reports. Report layouts and fuel types may differ, but the bunkering columns are the same.

Note: *BDN, density, etc. information not entered because this example is only for showing the quantity entry.*

Bunkering EOSP - FWE
+ HFO 150 mts
+ MGO 50 mts

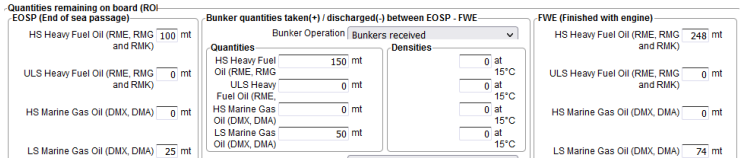
Bunkering FWE -SBE
+ HFO 50 mts
+ MGO 20 mts

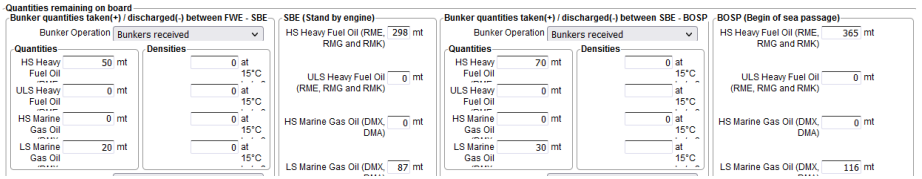
Bunkering SBE -BOSP
+ HFO 70 mts
+ MGO 30 mts

EOSP		FWE	PORT	SBE		BOSP
Bunkers EOSP	**Consumption EOSP-FWE**	**Bunkers FWE**	**Consumption FWE - SBE**	**Bunkers SBE**	**Consumption SBE-BOSP**	**Bunkers BOSP**
HFO 100 mts	- HFO 2 mts	HFO 248 mts	- HFO 0 mts	HFO 298 mts	- HFO 3 mts	HFO 365 mts
MGO 25 mts	- MGO 1 mts	MGO 74 mts	- MGO 7 mts	MGO 87 mts	- MGO 1 mts	MGO 116 mts

Arrival Report

Departure Report



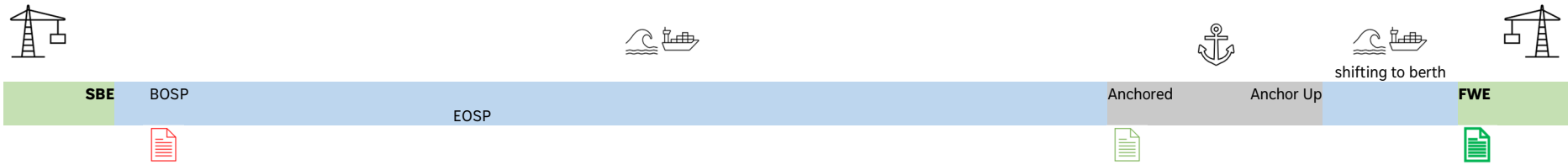


How to enter anchorage?

If the occurred event was an anchorage, please enter it as anchorage. You can add anchorage entry from **Schedule** tab > **Add** > click Anchorage > click **Add new destination**. A new window will appear

Anchorage before arrival:

Your voyage starts with your SBE and ends with FWE. Your port stay is calculated from FWE to SBE, and anchorage time will be deducted from SBE to FWE. Your average speed and average consumption will be correct. We check the hierarchical importance of events. EOSP<Anchor down<Anchor up<FLA<All Fast<FWE is the hierarchy, so FWE overrides all other event entries, and we can assess the actual arrival time. This is the main reason why FWE is important. Additionally, not all templates have similar events to report but they all have FWE



Bunkering or other operations at anchorage:

If your vessel is taking bunkers on roads e.g. at Gibraltar, you need to create a new Destination and select “Anchorage”, create a new anchorage if not already in the list by selecting “Add new destination”. Thereafter tick the box for the respective port activity e.g. “bunkering” and select “at anchorage”. You can comment and select the agent as usual. Upon arrival/departure please fill out the arrival and departure reports.
Importtnt here is to type in the same time for “ Anchor Down” and “Finish with Engine” respectively “Anchor Up” and “Stand by Engine”.

				EOSP	Anchored	**Destination Type: ANCHORAGE**	Anchor Up	BOSP
					FWE	Loading + Bunkering	**SBE**	

Emission Reporting

FAQs

Why SBE and FWE are so important?

EU MRV regulation defines voyage using departure-from-berth and arrival-at-berth, therefore reporting of those exact events is required for every single voyage. Sailing with a pilot and/or anchoring while waiting for port entrance is part of the voyage. The time spent at sea shall be calculated based on port departure and arrival information and shall exclude anchoring.

How to report shifting/s within the port?

Emission reporting divide fuel consumption into two and these are:

- Consumption during voyage
- Consumption at the port

Above understanding puts shifting into the port consumption category. This means that there is no need to report shifting within the port because shifting is subject to the port fuel consumption. Port consumption is the difference between the arrival and departure bunker levels. If you like to report the shifting within the port, you may report it via the comment section of the schedules or templates if applicable.

How to report tank/hold cleaning?

CO2 emissions from movements to tank cleaning between the arrival at the port of call and the departure from the port of call are considered as part of the voyage if happening before the arrival at the port of call or after departure from the port of call. Shortly, there is no need to create an entry for only cleaning at sea. If the cleaning occurs at the port, port activity as cleaning can be selected. Otherwise, it is considered as part of the voyage between two destinations.

How to report a ship-to-ship transfer of cargo?

If carried out within a port, ship-to-ship transfers are treated as cargo operations at berth.

Which traveled distance must be entered?

Distance traveled means distance traveled overground(IMO's MEPC 70). If the vessel drifts (i.e. while waiting for a berth) the distance should be included as the vessel is underway. Even if the main propulsion is temporarily not required, there will be still auxiliary generators and boilers in operation. Distances made for tank cleaning operations should be included as the vessel is underway. Unforeseen voyage deviations such as SAR (Search and Rescue), disembarkation of a sick crewmember, etc. should not result in an additional administrative burden for the carrier and verifier. Therefore it should be reported on a voluntary basis only.

How to determine DWT for emission reporting?

This section provides further guidance for some ship types on application of parameters for cargo carried

General cargo ships:

- Deadweight carried is zero for ballast voyages.
- When laden, deadweight carried is calculated as follows:

DWT carried = volume displacement x water density – ship's lightweight – fuel weight

Container ships:

- Deadweight carried is zero for ballast voyages.
- When laden, actual cargo weight should be ebtered as per MSC.1/Circ.1475.

LNG carriers:

Chemical tankers, Bulk carriers, Gas carriers and Combination carriers:

- Deadweight carried is zero for ballast voyages.
- When laden, mass of the cargo on board.

EU MRV (Monitoring, Reporting, and Verification)

IMO DCS (Data Collection System)

CF is a non-dimensional conversion factor between fuel oil consumption and CO2 emission in the 2014 Guidelines on the method of calculation of the attained *Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.245(66))*, as amended. The annual total amount of CO2 is calculated by multiplying annual fuel oil consumption and CF for the type of fuel.

Fuel oil Type	CF (t-CO2 / t-Fuel)
Diesel/Gas oil (e.g. ISO 8217 grades DMX through DMB)	3.206
Light fuel oil (LFO) (e.g. ISO 8217 grades RMA through RMD)	3.151
Heavy fuel oil (HFO) (e.g. ISO 8217 grades RME through RMK)	3.114
Liquefied petroleum gas (LPG) (Propane)	3.000
Liquefied petroleum gas (LPG) (Butane)	3.030
Liquefied natural gas (LNG)	2.750

IMO DCS vs. EU MRV

	EU MRV Regulation	IMO DCS
Entry into force	1 July 2015	1 March 2018
Scope	Greater than 5000 GT conducting commercial voyages to/ from/ between EEA ports	Greater than 5000 GT conducting international voyages
First reporting period	01 January 2018 to 31 December 2018	01 January 2019 to 31 December 2019

Manual	Monitoring Plan as per Commission Implementing Regulation (EU) 2016/1927	SEEMP Part II as per MEPC.282(70)
Reporting data	a. Fuel Oil Consumption b. Cargo Carried c. Distance traveled d. Time at sea and in port e. Transport work based on actual cargo f. CO2 emissions g. Port of departure/ arrival h. Separate data to be collected for berthing and voyage	a. Fuel Oil Consumption b. Design deadweight as cargo proxy c. Distance traveled d. Hours underway
Reporting format	Standardized format as per Commission Implementing Regulation (EU) 2016/1927	Standardized format as per MEPC.282(70)
Reporting platform	THETIS MRV	IMO GISIS
Verification authority	Third-party independent verifier	Flag State or Recognized Organization

Fuel Standards:

Marine fuels (cf. DIN ISO 8217), also called bunker fuels, are generally divided into two different classes:

Heavy fuel oil (HFO) and
Distillates

Marine gas oil (low sulphur distillate fuel)
2. Heavy fuel oil
a) 0.1% ultra-low sulphur fuel oil (ULSFO)
b) 0.5% very low sulphur fuel oil (VLSFO)
3. Exhaust gas cleaning system (scrubber) with
high-sulphur fuel oil (HSFO) >0.5% sulphur
4. LNG
5. Alternative fuels, for example, liquefied petroleum gas, methanol, compressed natural gas, biofuel,solar power and fuel cells. Any fuel source that has a sulphur content below the mandated 0.5% sulphur level.

Depending on whether the fuel was produced through distillation or accrued as a residue in the oil refinery, it is classified as a distillate (or “distillate fuel” according to the standard) or a residual fuel. In accordance with ISO 8217, residue fuels are divided into six fuel types depending on their viscosity (kinematic viscosity) – RMA, RMB, RMD, RME, RMG, and RMK – in combination with their max. kinematic viscosity limit value at 50°C. The viscosity is given in square millimeters per second (mm^2/s). Large values such as 700 describe very viscous residue fuels. The lower the kinematic viscosity value, the thinner the fuel. As a rule of thumb, the thinner the viscosity, the higher the quality of the marine fuel. Residual fuels are used in large, medium to slow-speed marine engines. Provided that the ship is not in a zone with special emissions restrictions (Emission Control Area, or ECA), this will usually be an intermediate fuel oil (IFO) 380 marine fuel type with the ISO 8217 designation RMG 380 or RMK 380.

In practice, mixtures of distillate fuels and residual fuels are mostly used, i.e., intermediate fuel oils (IFO). IFO 380 and IFO 180 (RMG) are the fuels most commonly used in shipping.

Grade	RMA 10	RMB 30	RMD 80	RME 180	RMG 180	RMG 380	RMG 500	RMG 700	RMK 380	RMK 500	RMK 700
Viscosity @ 50 °C, cSt	10.00Max.	30.00 Max.	80.00 Max.	180.0 Max.	180.0Max.	380.0Max.	500.0Max.	700.0Max.	380.0Max.	500.0Max.	700.0Max.
Density @ 15 °C, kg/m3	920.0Max.	960.0 Max.	975.0 Max.	991.0Max.	991.0 Max.	991.0Max.	991.0 Max.	991.0 Max.	1010.0Max.	1010.0Max.	1010.0Max.

IMO 2030 and 2050 Target

Versions:

Version	Date	Remarks
1.0	30.06.2021	First Version
1.1	28.08.2021	HOWTOs, Bunkering, Anchorage, Canal entries added, typos corrected, anchorage explanation detailed, Regulations and standards added for general information.
1.2.	28.10.2022	Added explanation of warnings for average fuel consumptions which differs from the annual median
1.3.	17.11.2023	Added explanation for warning “outdated template”