Explanation of bunker license (residual fuels and distillates and biodiesel)

The bunker license for residual, distillates and biodiesel was amended on a number of points in mid-2024 in response to findings of inspections by the operational service, new insights and the introduction of the mandatory Mass Flow Meter system as of 1 January 2026.
In this explanatory note, the articles of the license are explained and clarified in more detail.

General
The license is valid in the following municipalities: Rotterdam, Vlaardingen, Dordrecht, Schiedam, Zwijndrecht and Papendrecht.

Regulation (EU) 2017/352 of the European Parliament and of the Council of 15 February 2017 establishing a framework for the provision of port services and common rules on the financial transparency of ports ("Seaport Regulation") states that seaports may draw up rules with regard to port services. This includes bunkering of seagoing vessels.

The license holder has changed compared to the previous bunker license: the bunker transporter is no longer designated as the license holder, but the owner of the bunker vessel. This can be either a natural or a legal entity. The owner is named on the Community Inland Navigation Certificate for Inland Waterway Vessels (CvG) or on the Certificate of Inspection (CvO). With this amendment, the bunker license is the same as the regulations in the port of Antwerp-Bruges.

The license only covers the bunkering from a ship to a seagoing vessel of residual fuels and distillates and biodiesel. As far as biofuels are concerned, this is limited to biodiesel. Other alternative biofuels (such as bio methanol and bio ammonia) are therefore not covered by this license, but are licensed separately.

Explanation of the articles:

1. Definitions
The following have been added or amended to the definitions compared to the previous license:

Bunker operator: This is the person or company that takes care of the hiring and deployment of the bunker vessel in order to supply the fuel to the seagoing vessel.

License holder: the holder of the bunker license is the owner of the bunker vessel. In Antwerp, the owner of the vessel is currently already the holder of the bunker license. If an owner owns several bunker vessels, a license will state several bunker vessels that fall under the license and the conditions set therein. The owner of the bunker vessel is listed in the Community Inland Navigation Certificate for Inland Vessels or in the Certificate of Inspection. As indicated, this can be a natural person or a legal entity.

In addition, three additional ISO standards have been added to article 1 which are related to the inspection, certification and verification of the Mass Flow meter: ISO 17020, ISO 17025, ISO 17065.

2. Requirements for the licence holder

2.1 Licensed activities

The license only covers the delivery of residual fuels and distillates and biodiesel to seagoing vessels with a bunker vessel.

2.2 Requirements for the license holder

The obligation to have a VOG RP/NP also remains in force for the new license holder and will have to be submitted when applying for the license. The VOG must have the following screening profiles:

36: Monitoring production processes.
37: The disposal of goods.
38: The possession of substances, objects and objects, etc., which, if used improperly or incorrectly, pose a risk to humans (and animals)
62: (Mobile) transport in which goods, products, mail and parcels are transported and/or delivered, other than internal transport within a company.

The registration of the loading and delivery of the bunkers has been made free of form and does not have to be included in the ADN voyage journal. This may also be noted digitally.
In order to have a certain quality assurance, it is desirable that a license holder has a quality management certificate.
The license holder shall also ensure that the correct sample bottles are on board in order to ensure correct sampling in accordance with the provisions of Annex N of the ISO standard 13739. Certificates and forms of the deliveries must be kept for at least 5 years. This may be on board or in the office of the license holder.

A bunker manual must be present on board the bunker vessel in which the procedures with regard to loading and unloading and the operation of the various measuring instruments are described and as prescribed in the bunker license.

The eighth paragraph stipulates that the (copies of) certificates belonging to the MFM system must be present on board the ship; this can be done both digitally and via hard copy.

Furthermore, the license holder must ensure that the crew has sufficient knowledge and skills of loading and unloading the bunker vessel and the operation of the measuring equipment. This knowledge can be imparted, for example, by following a training course; training courses are given, for example, by the installers of the MFM systems on board the bunker vessel.

2.3 Reservations

Here you will find the conditions under which the license was granted and the conditions for revocation (if necessary), i.e. per license holder, which the ship or ships have in his/her possession.

3. The bunker vessel

This regulation includes the requirements with regard to the bunker vessel that are not already mentioned in other legislation or regulations. This mainly concerns measuring equipment and its calibration requirements.

3.1 Requirements for bunker vessels

The license holder shall ensure that the bunker vessel is equipped with the correct sampling equipment in order that mandatory samples can be taken as stated in ISO standard 13739, which describes the correct procedure. This can be a sampling station or a flange for taking a continuous drip sample. Calibration tables must be on board for the tanks present, which are certified.

Measuring equipment that does not fall under the MID, such as measuring tapes or measuring sticks, must be calibrated every year and provided with a certificate and calibration plate. The certificates of the measuring equipment must be available on board. That can also be digital.
The piping system must comply with one of the applicable international standards and the bunker vessel must be equipped with sufficient couplings or reducers to enable connections with other systems.

There should also be an on-board piping plan that clearly shows all loading and unloading lines, including an overview of the location of operational seals if required to ensure the integrity of the MFM system.

If work is carried out on tanks where the volume has (possibly) been adjusted, those tanks must be recalibrated. The certificates for this must be on board.

The tanks must be able to be (closed) sampled and measured in a proper and safe manner with the correct measuring and sampling equipment.

Furthermore, there must be sufficient and sufficient cleaning equipment on board to prevent or to engage an unexpected leak or spill.

3.2 Documentation on board bunker vessels

The certificate of quality must be on board before taking in the bunkers (as cargo). The license holder is ultimately responsible for this.

If blending is used during loading at the terminal (simultaneous loading of two or more different types of substances with deviating characteristics), the certificate can be issued after loading, but in any case before arrival at the seagoing vessel.

If a measurement report is drawn up (i.e. without the use of the MFM system), that measurement report must contain a number of mandatory data. The measurement report is drawn up before bunkering and immediately after bunkering.

Article 3.2, paragraph 5, regulates which articles are no longer applicable if the requirements of Chapter 4 of the license are already used correctly before 1 January 2026.

If the bunker measurement system meets the requirements as set out in Chapter 4 of the bunker license and is applied correctly, it is not necessary to draw up a measurement report containing the mandatory data indicated.
The following articles of Chapter 4 then apply:

4.1,	Definitions
4.2,	Scope
4.3,	Requirements for the MFM system
4.4.	Verification procedure
4.5.	Operational conditions for the use of the MFM system
4.6., paragraph 1, under a:	Report without delay if the conditions of use of the MFM system cannot be met.
4.6, paragraph 1, under c:	Stopping the bunker operation
4.6., second paragraph:	Reporting of quantity dispute
and 4.7:	Submission of documentation

The certificates referred to in Article 4.3(c), (d) and (e) must also have been submitted to the Harbour Master in advance via bunkering@portofrotterdam.com.

4. Mass Flow Meter System

General explanation

As of 1 January 2026, using an MFM system on board bunkering ships for bunkering residual distillates (bunker oil and diesel) and biofuels will be mandatory in the ports of Rotterdam and Antwerp-Bruges.

This MFM system has been made mandatory, firstly, because both ports have received complaints and signals from the bunker market, that there were serious quantity problems in the ports regarding the supply of bunkers. Complaints came not only from the buyers (shipowners) of the bunkers, but also from sellers and bunker surveyors. There were numerous examples.

Secondly, in addition to the complaints from the commercial parties involved in bunkering operations, the ports also received information from enforcement agencies that the parties involved in bunkering were also involved in illegal activities.

As ports, we want a transparent bunker market. To understand the full extent of the quantity problem, the ports commissioned an independent research firm to conduct interviews with stakeholder and conduct a survey. What the ports wanted to know was, firstly, whether there is actually a quantity problem at the ports in the supply of bunker and, secondly, what the solution is for any quantity problem. During the same period that the survey was conducted for the ports, the International Bunker Industry Association (IBIA) and the Baltic and International Maritime Council (BIMCO) also conducted a global survey on bunker quantity issues.
The results of the interviews and both surveys were clear. More than 80% of respondents indicated that there was a problem with bunker quantities at the ports. The results of the survey commissioned by the ports are similar to the findings of the survey conducted by IBIA and BIMCO in the first half of 2022, which revealed strong industry support for licences and more use of mass flow meters (MFMs). Both studies concluded, on the one hand, that there is a large-scale problem with bunker quantity in ports and, on the other, that introducing an MFM system is seen as the solution to address the quantity problem and make the bunker market transparent.

To concretize this obligation to have a MFM system, the ports took various steps in 2023, including looking at best practices in other ports, organising stakeholder meetings, speaking with individual parties in the bunkering industry, including sellers, suppliers, ship owners and bunker inspectors. The ports also spoke with (government) agencies involved in MFM systems, including manufacturers, installers, and certification and inspection bodies.
All the input combined resulted in the MFM system obligation as stipulated in Chapter X Mass Flow Meter system and explained article by article below.

Definitions
ISO 22192:2021
This article includes several definitions. One important definition in this context is the reference to ISO standard 22192:2021 "Bunkering of marine fuel using the Coriolis mass flow meter (MFM) system, 2021 edition." By using and referring to this global standard as much as possible, the aim is to create a framework for the use of an MFM system that is similar to the way this standard is used

elsewhere in the world.
The ISO standard is available digitally and in hard copy from the International Organization for Standardization website (https://www.iso.org/standard/72840.html).
Not all clauses from ISO 22192:2021 are applicable to the installation and use of the MFM system in the port. This is due to the fact that the ISO standard is an industry standard, and (European) legislation stipulates things for parts of it. This is the case in particular for the requirements for an MFM system specified by the European Measuring Instruments Directive.

MFM
In this licence, an MFM means a Coriolis mass flow meter. Other mass flow meters that do not operate according to the Coriolis principle are not permitted, as they do not fall within the scope of the requirements in the licence. In this licence, it is an MFM as described in clause 3.25 of ISO 22192:2021.

MFM System
An MFM system does not consist only of an MFM, but of various components. See also Article X.3 which lists the requirements for an MFM system. As regards the concept of an MFM system, this is described in clause 3.26 of ISO 22192:2021.

Bunkers
An MFM system is required for supplying bunker, which in this licence refers to residual distillates (bunker oil and diesel) and biofuels (biodiesel). Other (alternative) fuels are not within the scope of this licence. The relevant licence for these other fuels will specify the extent to which the use of an MFM system is mandatory.

Bunker operations
Using an MFM system is mandatory on a bunkering ship that delivers bunker to a seagoing vessel. An MFM system is therefore not mandatory at stationary bunkering stations, for example. Nor is using an MFM system required on board the bunkering ship when loading at a terminal. However, an MFM system can be used bidirectionally, meaning that even when bunker is delivered to the bunkering ship, the MFM system can be used to measure the quantity of bunker received. However, this must be coordinated in advance with the installer/manufacturer of the MFM system. As this is beyond the scope of the licence, the Harbour Master of Rotterdam does not assume any role or responsibility in this activity.
It is also not mandatory to use an MFM system on board bunkering ships when supplying bunker to other bunkering ships.

Licence holder
The holder of the bunkering licence is the owner of the bunkering ship. In the Port of Antwerp-Bruges , the ship owner is currently already the holder of the bunkering licence.
Currently, the Port of Rotterdam still has a system whereby the bunkering operator has a licence and the bunkering ships that the bunkering operator deploys for the bunkering operations fall under the scope of its licence (regardless of whether the bunkering ships are owned).
If an owner owns multiple bunkering ships, a licence will list multiple bunkering ships that are covered by the licence and the conditions set forth therein.

Scope
First paragraph
The first paragraph of Article 4.2 stipulates that a bunkering ship delivers bunker to a seagoing vessel

with an MFM system that is also suitable for the specific delivery of this bunker. This means that the delivered bunker must always be within the parameters suitable for the relevant MFM system. The main parameters will be pump speed, type of bunker and viscosity of the bunker. The main parameters will be pump speed, type of bunker and viscosity of the bunker. The MFM system will therefore have to be selected in proper consultation with the manufacturer or installer.

Second paragraph
The second paragraph states that the requirement for an MFM system on board a bunkering ship is not mandatory for bunkering ships with a cargo capacity of up to 300 tons. These are N-open tankers built and equipped for transporting and delivering marine propellants to other vessels as referred to in Article 1.2.1 of the ADN (the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways /Accord européen relatif au transport des marchandises dangereuses par voies de navigation intérieures).
There are 3 reasons why this type of bunkering ship does not need to have an MFM system on board. First of all, these bunkering ships are usually already equipped with PD (positive displacement) meters. Secondly, the ports have not received any complaints about these bunkering ships when it comes to delivering bunker. Finally, these bunkering ships only supply a small portion of their total bunker to seagoing vessels, primarily supplying inland navigation.

MFM system requirements
Part a
This article sets out the requirements for the MFM system on board the bunkering ship. First of all, it is important to read part a in conjunction with Article 4.1 and in particular the definition of an MFM and an MFM system. The MFM system must therefore work according to the Coriolis principle, and comply with clause 3.25 of ISO 22192:2021.

The MFM system also has to comply with and consist of the components referred to in clause 3.26 of ISO 22192:2021. This includes the mass flow meter itself, as well as all the associated instruments and pipelines.

Part b
The MFM system must comply with various legislation to work as accurately as possible. Not only must the correct mass be measured, but the MFM system also has to take into account, for example, gas elimination and correct the amount of mass being measured accordingly. In order to comply with this, the MFM system must comply with the Metrology Act for the Netherlands and the Royal Decree on Measuring Instruments of 15 April 2016 for Belgium in conjunction with the Measuring Instruments Directive (MID) and the International Recommendation R117:2019 of the International Organization of Legal Metrology for dynamic measuring systems for liquids other than water. For the sake of clarity, this must be the 2019 version of OIML R117. This is because the 2019 version has a separate chapter that lays down rules on taking air elimination into account.
Within the Measuring Instruments Directive (MID), MFM systems fall under Annex VII 'Measuring systems for the continuous and dynamic measurement of quantities of liquids other than water (MID-005)'.
OIML R117 edition 2019 includes the following chapters and appendices that provide specific frameworks and requirements for test procedures for measurement systems required for bunkering:

- Chapter 5.10 of International Recommendation OIML R 117-1 (2019) 'Dynamic measuring systems for liquids other than water, part 1 - Metrological and technical requirements' which provides frameworks for measuring systems required for bunkering; and

- Appendix K of the International Recommendation OIML R 117-2 (2019) 'Dynamic measuring systems for liquids other than water, part 2 - Metrological controls and performance tests' which describes the tests that must be performed for the measuring systems required for bunkering.

Part c
The MFM system must be installed as a continuous bunker measuring system on a bunkering ship intended to supply fuel. The MFM system must be certified and placed on the market by a notified body as referred to in Article 27.

Part d
The MFM system also needs to be certified by a notified body as referred to in Article 27 of the Measuring Instruments Directive (MID) as the "Bunker Metering System". Notified bodies can be found at: EUROPA – European Commission – Growth – Regulatory policy - SMCS

Part e
Finally, the MFM system must be equipped with a memory device/data logger. The purpose of data logging is to assess the quality of the complete bunkering operation. All data generated by the MFM system must be available for the receiving party or its representative and to the Harbour Master of Rotterdam. The data must be available for at least three
months and until the dispute is resolved.

Inspection procedure
First paragraph
The first paragraph stipulates that the MFM system has to undergo an annual inspection. In other words, the inspection carried out on an MFM system must never be older than 1 year ago. If this is the case, the MFM system cannot be used and a bunkering ship is not permitted to deliver bunker.

Second paragraph
The inspection of the MFM system consists of a zero point verification as described in Annex D of ISO 22192:2021. If the zero point verification does not meet the conditions of Annex D of ISO 22192:2021, the Harbour Master of Rotterdam must be notified immediately. The MFM system can no longer be used to deliver bunker either from that moment on.

Third paragraph
For the sake of clarity, the third paragraph explicitly states that the zero point verification must fall within the requirements of Annex D of ISO 22192:2021. If the zero point verification has been performed in accordance with the requirements of Annex D, then the issued certificate is valid for a maximum of 1 year.

Fourth paragraph
The zero point verification (inspection) must be performed by a party that also has the relevant accreditation for inspecting MFM systems intended for use in bunkering operations, as stipulated in the licence. There must be relevant accreditation for these MFM systems under ISO 17020, ISO 17025 or ISO 17065.

Fifth paragraph
The fifth paragraph stipulates that the licence holder has to keep the documents from the zero point verification on board. These documents can either be kept on board physically or digitally. In any

case, the documents must show that a zero point verification has taken place and that the MFM system meets the requirements as stated in the licence. In addition, there must be proof on board the bunkering ship of the party that performed the zero point verification and that this party also has the relevant accreditation to perform this zero point verification. This party must have the relevant accreditation under ISO 17020, ISO 17025 or ISO 17065 for an MFM system, as stipulated in the licence.

Sixth paragraph
When an MFM system is certified, the copies of the corresponding certificates specified in the fifth paragraph must be forwarded immediately with the Harbour Master of Rotterdam. It will be announced at a later date how this can be done (digitally).

Seventh paragraph
If an MFM system fails to meet the requirements set forth in the licence, it obviously cannot be used. The seventh paragraph explicitly includes this restriction. If bunkering operations are nevertheless carried out, the Harbourmaster of Rotterdam will take enforcement action.

Operational conditions for the use of the MFM system
First paragraph
Bunkers are a potentially dangerous substance for humans and the environment. It must therefore be handled with maximum attention to safety, health and the environment. In this context, bunkering operations must therefore comply with the general requirements of clause 4 of ISO 22192:2021 and its Annex A. Annex A of ISO 22192:2021 also refers to the bunker checklist included in Annex L. However, in the ports of Rotterdam and Antwerp-Bruges, the ISGOTT (International Safety Guide for Oil Tankers and Terminals) bunker checklist is used and the ISGOTT bunker checklist is therefore referred to instead of the bunker checklist in Annex L. The ISGOTT bunker checklist must therefore be used.

Second paragraph, opening sentence
The second paragraph stipulates that the complete bunkering operation must comply with the requirements of clause 9 and its annexes (referred to in clause 9) of ISO 22192:2021. This includes the necessary documents as well as the procedures to be followed.
There are several exceptions to the principle that clause 9 of ISO 22192:2021 must be met during a bunkering operation. First of all, the following clauses are exempted from ISO 22192:2021:

- Clause 9.1: This clause specifies the scope of clause 9. However, the ISO 22192:2021 standard is an industry standard and not a law. Since parts of (European) legislation apply to the installation and use of an MFM system, it is not possible to declare ISO 22192:2021 applicable in its entirety. Clause 9.1 is therefore exempted.
- Clause 9.3: This clause specifies rules for the bunker surveyor. Although the bunker surveyor plays an important role in the bunkering process, the ports lack a legal framework to set rules if a bunker surveyor is used in a bunkering operation. As such, this clause is not made mandatory.
- Clause 9.4.2, part g: this clause regulates what documents must be on board the bunkering ship. Part g refers to the obligation to have an "MFM system approval letter from an accredited body for custody transfer" on board. This document does not need to be on board since, as regards the installation of the MFM system, the Measuring Instruments Directive (MID) is followed rather than ISO 22192:2021. As regards this licence, this is governed by X.3 part d.
- Clause 9.6.4.3: This clause states that if a seal of the MFM system is broken or missing, it

must be reported and the MFM system cannot be used. Reference to this clause is not necessary, as the ports have included their own provision in Article X.6 on what to do in the event that the licence conditions are not met.

- Clause 9.7.1.3: Clause 9.7.1.3 also explains what to do if an MFM system is not working correctly. As indicated above, the ports have their own procedures for this, see Article X.6 of the licence.
- Clause 9.7.2.12: this clause prohibits another bunkering ship from coming alongside while bunker is being supplied to a seagoing vessel. Another bunkering vessel coming alongside (double banking) is a frequent occurrence in ports and is not considered an activity that can impair bunkering with an MFM system. In view of this, this restriction is not reprised in the bunkering licence.

The opening statement to the second paragraph also specifies that there are several exceptions/amendments with respect to the sections in clause 9, namely:

Second paragraph, part a
Clause 9.4.1.2 and annex O refer to both received and supplied bunker. The licence only stipulates that records need to be kept of the bunkers supplied. Furthermore, if used bi-directionally, an MFM system will normally keep both records (supplied and received), but under the licence it is therefore not mandatory to do this, since ports do not have a legal framework to make recording the bunker received mandatory.

Second paragraph, part b
Clause 9.4.1.4 refers to the 'accredited body' in connection with being able to display the 'meter totalizer log' data. Here, 'accredited body' refers to the Harbour Master of Rotterdam.

Second paragraph, part c
Clause 9.4.1.5 refers to the 'accredited body' in connection with keeping the 'meter totaliser log' on board for a minimum period of three months. Here, 'accredited body' refers to the Harbour Master of Rotterdam.

Second paragraph, part d
Clause 9.6.1 refers to clause 5. The reference to clause 5 is not possible from a legal perspective, as the legal provisions of the Measuring Instruments Directive (MID) apply here.

Second paragraph, part e
Clauses 9.6.2 and 9.6.3.5.1 refer to the bunker checklist in Annex L. However, in the ports of Rotterdam and Antwerp-Bruges, the ISGOTT (International Safety Guide for Oil Tankers and Terminals) bunker checklist is used and the ISGOTT bunker checklist is therefore referred to instead of the bunker checklist in Annex L. The ISGOTT bunker checklist must therefore be used.

Second paragraph, part f
Clause 9.7.1.5 stipulates that the MFM system must be used in all bunkering operations, both during loading and when supplying bunker. The requirement to use the MFM system only applies to the supply of bunker from a bunkering ship to a seagoing vessel. There is therefore no requirement for loading the bunker via the MFM system. However, using the MFM system when loading is a possibility (the MFM systems are in principle bidirectional). This must nevertheless be considered during the installation. If you wish to use an MFM system for both loading and unloading bunkers, this should be discussed with the installer/manufacturer of the MFM system.

Second paragraph, part g
Clause 9.8.3, part a, stipulates that the bunkering metering ticket must show the bunkering ship's IMO number. However, in the ports of Rotterdam and Antwerp-Bruges, bunkers are supplied in almost all cases by bunkering ships certified as barges. As such, these bunkering ships do not have an IMO number. In view of this, if a bunkering ship does not have an IMO number, it is mandatory for the bunkering ship to indicate its ENI number on the bunkering metering ticket. Every barge has a European Number of Identification (ENI). The ENI number is a unique 8-digit identification number for barges.

Third paragraph
An important operational requirement for the correct use of an MFM system is that the bunkering ship's crew has sufficient knowledge to properly perform bunkering operations using an MFM system. In view of this, the third paragraph of Article X.5 states that the licence holder is responsible for ensuring that the bunkering ship's crew has sufficient knowledge to operate an MFM system. The licence holder must also ensure that the crew complies with the stipulations of the bunkering licence. The ports do not stipulate the way in which the licence holder must ensure compliance with this obligation.

Reporting obligation and suspension of licence in case of non-compliance with licence conditions

First paragraph, opening sentence
The first paragraph of Article 4.6 specifies the actions to be taken by the licence holder in the event of non-compliance with the conditions set forth in this chapter and non-compliance with the mandatory clauses and annexes of ISO 22192:2021.

First paragraph, part a
Pursuant to this provision, first of all, the licence holder must notify the Harbour Master of Rotterdam if the conditions of this chapter or the conditions of the mandatory clauses and annexes are not met, or the latter must be notified on the licence holder's behalf. This must be notified without delay. In other words, as soon as reasonably possible. The Harbour Master of Rotterdam will announce at a later stage how this must be notified.

First paragraph, part b
If an MFM system no longer meets the requirements of this licence or the requirements set forth in the mandatory clauses of ISO 22192:2021 or annexes, then no new bunkering operations can start. If bunkering operations nonetheless take place, this will constitute a breach of the conditions of the licence, which is criminal conduct which will be prosecuted.
If there is a situation where the MFM system does not meet the above requirements, the licence holder can apply for an exemption from the Harbour Master of Rotterdam. There may be conditions to this exemption by the Harbour Master of Rotterdam, including that bunkering is permitted without an MFM system. This exemption will be detailed at a later date by the ports.
Furthermore, it is expected that the possibility to request an exemption will only be used in very rare cases; experience with MFM systems at the Port of Singapore shows that there are virtually no problems with MFM systems and that they are very robust and reliable.

First paragraph, part c
If an MFM system no longer meets the conditions of this licence or the requirements as set forth in the mandatory clauses of ISO 22192:2021 or annexes, and the bunkering operation has already

started, the following applies:
First of all, the already commenced bunkering operation must be stopped as soon as it is identified that the MFM system is no longer functioning in accordance with the conditions and requirements in this licence. The bunkering operation can only be resumed thereafter on condition that an alternative measurement method is used. This alternative measurement method must be agreed to in writing by the receiving seagoing vessel. If this is the case, the bunkering can be completed using the agreed alternative measurement method.
However, any new bunkering cannot be started unless an exemption request has been submitted to and granted by the Harbour Master of Rotterdam. See the explanation and procedure under part b. Again, the MFM system is very reliable and given the experience in the Port of Singapore with the MFM system, an exemption will be an exceptional situation.

Second paragraph
In the event of a dispute regarding quantities, the second paragraph stipulates, in addition to the provisions in clause 9.9.2 of ISO 22192:2021, that the Harbour Master of Rotterdam must be notified immediately of such dispute. The method of (digitally) reporting disputes about quantities is still being decided on.
In any event, the Harbour Master of Rotterdam is not part of any disputes about quantities and play no role in settling a dispute. Indeed, such disputes are between the supplying and receiving parties.

Required documentation
For the sake of clarity, this article explicitly states that the required documentation of Articles 4.3, 4.4 and 4.5 will be accepted both digitally and in hard copy. It should be noted that the ports prefer to receive digital versions of the document. Details of how documentation can be provided will be announced.
The ports will also consider the extent to which documentation shared with one port can also be used by the other in order to keep the administrative burden as low as possible for the licence holder.

Entry into force
The obligation to perform bunkering with an MFM system will apply from 1 January 2026. The expectation is that more and more bunkering ships will be equipped with an MFM system in the period leading up to 1 January 2026. The ports strongly encourage voluntarily using an MFM system before then. Firstly, because using it will allow the crew to gain experience with the MFM system, and secondly, because using the MFM system will increase confidence in the bunker market.
An ambitious but realistic implementation deadline has been set. Between now and 2026, licence holders will have sufficient time to purchase and install an MFM system, in order to perform bunkering using the system by 1 January 2026. The ports will also actively monitor and enforce whether a MFM system is on board, and whether it is being used correctly, from 1 January 2026.

‘Final and binding’
A point of discussion is whether the final measured number of bunkers as indicated by the MFM system is 'final and binding'. Our position is that we cannot indicate this in the license (just as Singapore does not), but in case all regulations and actions with the MFM system are carried out correctly, there can be no room for discussion about the number of bunkers supplied. If a dispute does arise, an independent party will be able to provide a definitive answer, for example by analyzing the raw data from the bunker measurement system (see also Chapter 8).

5. Bunker Captains

Regulations for the bunker captain.

The previous bunker license prescribed a voyage and cargo logbook, as was mentioned in the ADN. In consultation with the industry, this has been brought to a more form-free format, as long as the data mentioned can be found in a logical and clear way. Of course, this can also be done electronically.
The following data must be recorded:

- date and time of loading and bunkering;
- name and type of fuel, stowage and location of loading and bunkering;
- documentation of receipts and deliveries;
- any internal pumping or transfer to other bunker vessels;
- sampling and seal numbers of the samples;
- disputes between recipient and supplier (letters of protest);
- cleaning operations.

Cleaning operations should only be noted if it is necessary to clean the tanks in case of a dockyard service or other necessity why a tank needs to be clean.
If a spill of a liquid occurs, this must be reported immediately. Especially if the spill spreads or may spread to the water, it is important to take measures as soon as possible. The notification takes place via VHF channel 14.
Furthermore, the bunker captain carries out a check on the piping system before bunkering takes place to ensure that all drain points, connections or inspection gates are closed and blinded and, where necessary, sealed.

During bunkering, internal pumping (from tank to tank) is not allowed, unless this has to take place for safety reasons. The chief engineer officer of the receiving ship shall always be informed.

Furthermore, the agreements made (pump pressure, temperatures) as stated on the bunker form must be respected.

The bunker captain ensures that when using a bunker measuring system (manual measurement, PD meter or MFM) the measuring equipment is not or cannot be manipulated. Communication must be established between the bunker vessel and the receiving party, especially in the case of operations and handling of valves and pumps.

Blending is not allowed during bunkering. It is prohibited in the ADN legislation to unload two (or more) types of cargo at the same time via one (1) unloading pipe. There is still a discussion within the Safety Committee of the UNECE, where the amendments to the ADN are being prepared, whether and under what conditions this could be possible in the future. That is why this article states that the action is allowed with the permission of the competent authority (Inspectorate Human Environment and Transport).

If one of the parties wants to stop bunkering (both recipient and deliverer), the other party must comply immediately.

When the bunkering is finished, the bunker captain shall ensure that the bunker hose is sufficiently emptied to the receiving vessel. This must be done in a safe manner. Then the valves are closed and the discharge pipe is emptied into the tanks of the bunker vessel. The quantity that passes through the MFM must be recorded and deducted from the total quantity delivered.

Operational reporting and registration

The notification of the bunkering operation is laid down in Article 8.9 of the Port Bye-laws 2020 Rotterdam. The notification via TimetoBunker has expired with this new license, as the program was no longer supported by the software supplier. Instead, the PortBase Bunkers notification has now been included in the Port Community System.

As the license holder of the bunker license is now the owner of the bunker vessel or vessels, the license holder must ensure that the bunker operator and the bunker vessel both have an account with PortBase so that the bunker vessel can report to the Harbour Master, also on behalf of the bunker operator. With the account, ships can comply with the bunkering reporting obligation.

The following must be submitted with the application for a bunker license by each owner of the bunker vessel or vessels: Certificate of inspection and approval and the title deed (land registry) of the vessel showing who the owner of the vessel is. The person (legal or natural person) must also have a Certificate of Good Conduct (VOG). See also under 2.2. of these notes.
The supplier of the fuel must also be known to PortBase, in connection with the notification to Customs.

In connection with the optimization process (Port Call Optimization), it is important to enter the correct start and end time of the bunkering. At the start of the bunkering, an expected end time must be entered. As soon as this time deviates by more than 30 minutes, a new expected end time must be reported. End time means that the bunker vessel is no longer connected to the receiving seagoing vessel via the bunker hose, that all documents and samples have been processed and that the bunker vessel sails away from the seagoing vessel. In the near future, it will probably be possible to detect via AIS that a bunker ship has finished bunkering and is sailing away. At that moment the end time will be set automatically.

Bunker surveyor
Two separate conditions have been included to protect the bunker surveyor. The bunker captain must cooperate if a bunker surveyor is hired. This can be by both the supplying and the receiving party. The bunker surveyor must be able to do his job and needs access to the various tank tables, data logger and documentation that the bunker captain has. The bunker surveyor should also be allowed to place operational seals if this is necessary to ensure the integrity of the MFM system.

6. Sampling

This chapter contains rules regarding the taking of samples in order to check the quality of the fuel supplied before the ship can put it into service. A distinction is made between samples that the bunker captain can take (i.e. voluntarily) at a terminal and samples that are legally required to be taken on board the seagoing vessel.

Requirements for sampling at terminals
If a sample is taken during loading at a terminal, permission must be granted by the terminal. To be able to do this correctly, the bunker vessel must have a continuous drip sampler (flange). The sample is taken in accordance with the conditions of the ISO standard 13739. If it is not possible to take a sample at a terminal, or if permission is not obtained, a note must be made in the cargo registration.

Requirements for sampling on seagoing vessels
Sampling on board the seagoing vessel shall also be carried out in accordance with the provisions of ISO 13739. In addition, there is a legal basis for taking the MARPOL sample on board the seagoing

vessel (bunker manifold), which is further explained in Annex VI of MARPOL in a guideline of the MEPC (Marine environmental Protection Committee) of the IMO MEPC 182. (59).
In addition to the mandatory MARPOL samples, the other samples can (preferably) also be taken at the manifold of the seagoing vessel, or at a sample station on the bunker vessel equipped for this purpose. The other samples (3) are for the receiving seagoing vessel, the supplying vessel and for analysis. The samples are sealed in accordance with the provisions of ISO 13739.
The seal numbers of the sample bottles are copied to the (e)BDN and if more samples are taken than prescribed, these samples are also sealed and the seal numbers are noted on the (e)BDN.

At the moment, the IMO is still working on a proposal to adjust this sampling procedure and to publish a guideline on how this can best be implemented. Depending on the outcome, the license on this point may (possibly) be amended in the future. The sample bottles used may have a capacity of up to 1 litre.

7. Blending and debunkering

This chapter regulates special situations such as de-bunkering ('unloading' bunkers) and blending fuels.

Blending

As mentioned earlier, blending two or more types of fuels during delivery is not allowed due to the prohibition in the ADN. There may be circumstances in which it is necessary to do so, but only with an exemption or permission from the competent authority (Human Environment and Transport Inspectorate).

Debunkeren

Debunkering is the act of disposing of fuel, while the fuel still remains suitable for use. There can be various reasons for debunkering: changing the type of fuel or a property where the fuel can no longer be used on board under certain conditions.

If the fuel is unsuitable for use and cannot be reused as fuel through simple processing, it is no longer a debunkering but it must be considered a waste stream and must be handed over to a licensed waste collector. To determine whether there may be a waste material, a debunker form has been developed. The form can be downloaded from the Port of Rotterdam website. The agent of the seagoing vessel must fill in the form and **not** the recipient of the fuel to be debunkered. Before debunkering, the bunker captain must take one or more samples from the tank from which debunkering is to be carried out. These are sealed, labeled and registered on the debunker checklist.

During debunkering, the bunker captain ensures that samples are taken in accordance with the regulations as for regular bunkering (Article 6.2 of this license). The debunker checklist is completed and the start and end times are reported to the HCC. This can be done by e-mail. This notification is therefore not made via Portbase's Bunkers Notification. The debunker checklist is kept on board the issuing seagoing vessel as well as on board the bunker vessel.

8. Disputes and complaints

Disputes and complaints hotline

The Harbour Master of Rotterdam has set up an e-mail address so that those involved can submit complaints regarding the delivery of bunkers. In the event of disputes relating to quantities , the licence holder must report the complaint (letter of protest) via bunkering@portofrotterdam.com. This is different from the current license where the complaint can be submitted (voluntarily). In practice,

the bunker captain will receive and register the Letter of Protest (LoP) on behalf of the license holder. The complaint must be accompanied by the necessary and relevant documents that support the complaint. This notification must be made within 14 days after delivery of the bunkers in the case of quality or within 24 hours in the event of a dispute or complaint about the quantity.

After receipt of the complaint, depending on the nature of the complaint, an investigation may be initiated by the Harbour Master into the cause of the complaint. If the complaint concerns a quantity difference using an MFM system, an independent specialist agency may conduct an investigation by an interested party to analyse the raw delivery data of the MFM system.