

Decree adopting Passing Distances to LNG Bunker ships engaged in LNG bunkering operations

**Decree No. 2020/21**

The Director of the Central Nautical Management North Sea Canal

**Having regard to:**

- Article 1.5 of the Regional Port Bye-laws for the North Sea Canal Area 2019, which provides that the Mayor and Aldermen can attach regulations and restrictions to a designation in order to protect the importance of the designation in question;
- Article 1.9 of the Regional Port Bye-laws for the North Sea Canal Area 2019, which provides that the Mayor and Aldermen can grant exemption from the regulations and prohibitions included under or pursuant to these Bye-laws.
- Article 8.1, paragraph 2, under c, of the Regional Port Bye-laws for the North Sea Canal Area 2019, which provides that the Mayor and Aldermen can designate areas or berths where bunkering of certain designated fuels is permitted.
- Article 8.8, paragraph 1, of the Regional Port Bye-laws for the North Sea Canal Area 2019, which provides that during LNG bunkering operations, an LNG-powered seagoing ship must exhibit an additional signal consisting of the International Code of Signals flag "B" by day and a bright all-round fixed red light by night.
- The Mandate, Power of Attorney, and Authorization Decree, dated 3 December 2019, on the basis of which the Director of the Central Nautical Management North Sea Canal Area is mandated to adopt Decrees on behalf of the Mayor and Aldermen;

**Having considered that:**

- The Director of the Central Nautical Management North Sea Canal Area, on behalf of the Mayor and Aldermen, is authorised to impose additional conditions and restrictions to the designation of areas or berths where LNG may be bunkered;
- In addition, by means of an exemption in individual cases, the Director of the Central Nautical Management, by way of derogation from the afore-mentioned designation, can designate berths where LNG may be bunkered;
- The bunkering of LNG can result in risks that may be reduced by preventing other ships to come too close to the LNG bunkering operations;
- Included in the LNG bunker checklist for bunkering Liquefied Natural Gas (LNG), which has been adopted in accordance with article 8.7 of the Regional Port Bye-laws for the North Sea Canal Area 2019, is the concept of a Maritime Safety Zone - the so-called Marine Exclusion Zone;
- The determination of the distances included in the Maritime Safety Zone - the Marine Exclusion Zone - is intended, on the one hand, to minimise the risk of collision with the LNG bunker ship, and on the other hand as an additional safety margin, within which no activities may take place that could endanger the safety of the LNG bunker ship;

- The risk of collision at the location is highly dependent on the type, the manoeuvrability and the speed of the ship passing the location and also on the current weather conditions;
- The so-called Bunker Zone, within which no activities may take place that could possibly lead to the ignition of leaked LNG, has not been defined in the regulations applicable to the North Sea Canal Area; that is the reason that for this Decree a link has been sought with Article 1.01 of the Rhine Navigation Police Regulations (RPR), which requires a distance of 20 metres from the bunker connection point;
- The Marine Exclusion Zone, as shown in the explanation of this concept, will require further substantiation by the Port Authority;
- This Decree provides a framework for the Maritime Safety Zone.

**Has decreed the following:**

- I. To adopt the minimum passing distances, as listed under II, for berths where LNG bunkering operations take place. The minimum passing distance is the shortest distance between the passing ship and the LNG bunker ship berthed alongside the LNG-receiving ship to which the bunker ship's LNG bunker hose has been connected. The Decree applies both to designated areas and to berths for which an exemption to carry out LNG bunkering operations has been granted.
- II. The following passing distances, as referred to under I, are determined and must be maintained by the following types of ships passing the area or the berth:
  - a. Inland ships must at all times maintain a distance of at least 10 metres;
  - b. Seagoing ships manoeuvring during arrival at or departure from a berth close to the berth of the LNG bunker ship and the ship being bunkered must maintain a distance of at least 20 metres;
  - c. Seagoing ships underway in the port must maintain a distance of at least 50 metres;
- III. This Decree will enter into force 3 days after its publication in an Announcement to Shipping IJmond North Sea Canal Area Central Nautical Management (BASIJN).

Adopted on behalf of the Mayor and Aldermen of Amsterdam on May 29<sup>th</sup> 2020.

The Director of the Central Nautical Management North Sea  
Canal Area

A handwritten signature in purple ink, appearing to read 'J.H.M. Mateyo', with a horizontal line underneath.

J.H.M. M. Mateyo



### Explanatory notes

Bunkering is the supply of solid, liquid or gaseous fuels or any other energy source used for the propulsion of ships or for the general or specific

energy supply on board ships. The bunkering of LNG poses risks to the external safety (such as fire and explosion) to the surrounding area or to other port users. In order to minimise these risks and thus ensure safety, the Director of the Central Nautical Management North Sea Canal Area, being mandated on behalf of the Mayor and Aldermen of Amsterdam, may adopt various measures to minimise these risks.

Based on safety studies, a safety framework for LNG bunkering has been developed. The safety measures to be taken on the basis of this safety framework will be included in the regulations attached to the LNG bunker operator's permit. In addition, LNG may only be bunkered at berths that are structurally designated by Decree and the risk contour of these berths may not include vulnerable objects; LNG may also be bunkered at berths designated by individual exemption as long as LNG can be safely bunkered at that location.

In addition to the measures mentioned above, it was necessary to impose requirements on other port users and passing ships to keep them at a safe distance from the LNG bunkering operations. These requirements reduce the risk of collision and ensure that passing ships do not pose a source of ignition in the event of leakage of LNG - although such leakage has a very low probability of occurring.

Passing ships are made aware of LNG bunkering operations because the seagoing ship exhibits the International Code of Signals flag "B" by day and a bright all-round fixed red light by night; and also because there is an LNG bunker ship alongside.

In determining the distances, a pragmatic link has been sought with the distances used in the Inland Navigation Police Regulations (BPR) and the Rhine Navigation Police Regulations (RPR).

### Inland ships

The radius of the bunker safety zone applied in the RPR is 20 metres from the LNG bunker connection; because the breadth of the LNG bunker ship itself is more than 10 metres, the required passing distance for other inland ships is set at a minimum of 10 metres; this way, the total distance will always be more than the required 20 metres of the bunker safety zone. BPR, in addition, requires ships to moor at least at 10 meters distance from inland ships carrying the lights (blue all-round lights) and shapes (blue cones) prescribed for tankers carrying hazardous substances, including inland LNG carriers. Inland ships have good manoeuvrability and that is why the 10-metre passing distance applies in all cases, both when they are underway in the port and arriving at or departing from a berth close to where LNG is being bunkered.

### Seagoing ships

For seagoing ships, arriving at or departing from a berth close to where LNG is being bunkered, a safety factor of 2 applies, resulting in a passing distance of 20 metres (2 times 10). The reason for this is that where seagoing ships usually have less manoeuvrability than inland ships, they go at reduced speed (manoeuvring speed) during arrival and departure, which reduces the risk of collision in comparison to navigating at higher speeds in the port.

For seagoing ships underway, a link has been sought with the distances used in article 10.09 of the BPR. This article prescribes a distance of 50 metres from ships loaded with hazardous substances; such ships are required to exhibit the International Code of Signals flag "B" or a bright all-round fixed red light. Seagoing ships engaged in LNG bunkering operations must exhibit the same lights and shapes as prescribed in BPR 10.09; and because seagoing ships underway require a greater safety margin than the 20 metres required during arrival or departure, a link has been sought with the distance of 50 metres.