

Memorandum of Understanding Onshore Power ambitions for Container Terminals in Ports

Parties involved:

Havenbedrijf Antwerpen, a public limited liability company incorporated under the laws of Belgium with its registered office at Zaha Hadidplein 1, 2030 Antwerp, Belgium, company number 0248.399.380, hereinafter referred to as “Port of Antwerp” and represented by Mr Jacques Vandermeiren, CEO of Port of Antwerp;

Port of Bremerhaven, Free Hanseatic City of Bremen, port infrastructure “Special Asset Port” represented by Bremenports GmbH & Co. KG, represented by Mr Robert Howe, Managing Director of Bremenports, hereinafter referred to as “Port of Bremerhaven”;

Hamburg Port Authority, Anstalt öffentlichen Rechts, a German public-law entity, represented by Mr Jens Meier, CEO of Hamburg Port Authority;

Haropa Port, établissement public national à caractère industriel, a French public-law entity, represented by Mr Stéphane Raison, CEO of Haropa Port;

Havenbedrijf Rotterdam N.V., a public limited company (naamloze vennootschap) having its seat in Rotterdam, its address at Wilhelminakade 909, 3072 AP Rotterdam and registered in the trade register under number 24354561 (“PoR”) and represented by Mr Allard Castelein, CEO of Port of Rotterdam.

Hereafter referred to as “the Parties”.

For the purpose of this MoU, the term Onshore Power Supply, hereinafter referred to as OPS, will be understood to refer to any technology that allows ships to change their power supply from the vessel’s engines to shore-based electricity, with a preference for green electricity. This technology can be developed in the form of both mobile and shore-bound infrastructure.

Given that on the one hand, it is currently unclear when and in what form the deployment of OPS will be imposed by European Union legislation and given the fact that, on the other hand, the Parties are convinced that OPS is a suitable short-term solution to reduce emissions at berth.

In order to green current container activities and in order to enable future developments, the Parties hereby agree, as a first step, to establish a framework on the deployment of OPS for the major container terminals at their ports, without prejudice to obligations defined on a European or international level. In addition, certain parties will extend the implementation of OPS installations to include additional vessel and terminal types (e.g. smaller container vessels, cruise ships, con-ro/roro berths etc.), in order to maximise emission reductions in their respective ports. The parties may pursue to extend the scope of the MoU in this respect.

This framework aims to ensure a level playing field between the Parties and between terminal operators in their respective ports. This coordinated approach also provides the clarity needed for ships to be equipped and guarantees the uptake of shore power in the different ports. In this way, the approach aims to ensure an increase in the utilisation rate of the infrastructure and ship equipment, thereby improving the business case for all parties. Finally, this MoU takes the form of a joint cooperation effort of an entire port range, as proposed under the World Ports Climate Action Program (WP CAP).

Article 1. Aim

The Parties agree to the framework, as set out below, for the deployment of OPS for sea-going vessels at container terminals in their ports as a first step towards zero emission shipping.

Article 2. Locations to be equipped with OPS installations

The Parties agree that all berths at container terminals serving, on a regular basis, Ultra Large Container vessels (ULCV) with a length overall (LOA) above 366 m, will be subject to this MoU.

For the avoidance of doubt, the existing terminals as referred to in Article 1 are:

- Port of Antwerp: Europaterminal¹, Noordzeeterminal, MPET and Antwerp Gateway
- Port of Bremerhaven: Container terminal Wilhelm Kaisen
- Port of Hamburg: Container Terminal Burchard Kai (CTB), Container Terminal Tollerort (CTT), Eurogate Containerterminal Hamburg (CTH), Container Terminal Altenwerder (CTA)
- Haropa Port: Port 2000 container terminals
- Port of Rotterdam: Container terminals on Maasvlakte 1 and 2

New container terminals of the aforementioned design and purpose that are to be built in the respective ports and that meet these criteria will also be included within the scope of this MoU. The Parties will inform each other about new container terminals meeting these criteria.

¹ New Quay wall construction. As this terminal will only be operational by 2030 for ULCV, the timeframe as stipulated in article 3, will not apply to the Europaterminal.

The Parties may, over time, pursue to extend the MoU to additional types of vessel and terminal (e.g. smaller container vessels, cruise ships, con-ro/ro-ro berths etc.).

Article 3. Timing

OPS installations, as referred to in Article 2, must be operational by 1 January 2028 at the latest. All parties will strive for earlier implementation.

Article 4. Power supply

The Parties will endeavour to ensure that the electricity provided originates from renewable sources (green electricity).

Article 5. Responsibility to realise

The Parties will enable the realisation of this infrastructure. Depending on the internal structure of the parties and the respective allocation of responsibilities and commitments, the parties may avail themselves of other stakeholders in their ports (e.g. terminal operators) in order to fulfil their obligation under this MoU.

Article 6. Legal framework

- The Parties call on the competent authority to implement a legal framework for the use of the OPS infrastructure that ensures a level playing field between the parties offering OPS (for instance, by making the uptake of OPS mandatory for vessels, unless an alternative technical solution and/or an alternative fuel with an equivalent impact is used). The Parties call upon the regulators to seek to ensure a maximum degree of harmonisation between the respective frameworks.
- The Parties call upon the regulators to seek to ensure a maximum degree of harmonisation between the national frameworks for energy taxation. The Parties call upon the competent authorities to align their national systems for energy taxation in the absence of a European permanent tax exemption for OPS.
- The Parties call upon the local, regional, national and European authorities to support actions to obtain public funding and financing to realise viable and scalable onshore power projects in the respective ports.

Article 7. Duty to inform and interim assessment

The Parties agree to provide each other with an annual progress update. The format will be decided upon by the Parties. In 2025, the Parties will discuss and assess the state of play of the ambitions put forward in this MoU.

Article 8. Additional Parties

Other ports will be allowed to join this memorandum, thereby fully subscribing to the ambitions stated in this framework.

Article 9. Duration

The MoU is valid for the period 2021 – 2030.

Signed 18 June 2021.

Signatures of the Parties



Jacques Vandermeiren
CEO of Port of Antwerp



Robert Howe
Managing Director of Bremenports



Jens Meier
CEO of Hamburg Port Authority



Stéphane Raison
CEO of Haropa Port



Allard Castelein
CEO Port of Rotterdam