

17. Mannheimer Tagung für Binnenschifffahrtsrecht

The Impact of Environmental and Port Regulations

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1. Introduction.

- <https://green-inland-ports.eu/>

 Green Inland Ports

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A study in Enabling Sustainable
Management and Development
of Inland Ports

1. Introduction.

- scope of the study: ecological impact of inland ports
 - emissions to air
 - emissions to water
 - waste
 - 'energy' (noise, light, ...)
 - use of land
- Onshore Power Supply (OPS)
- waste collection - CDNI Convention

2. OPS.

- [Alternative Fuels Infrastructure Directive 2014/94/EU]

- Art. 4.5

Member States shall ensure that the need for *shore-side electricity supply* for inland waterway vessels and seagoing ships in maritime and inland ports is assessed in their national policy frameworks. Such shore-side electricity supply shall be installed as a priority in ports of the TEN-T Core Network, and in other ports, by 31 December 2025, unless there is no demand and the costs are disproportionate to the benefits, including environmental benefits.



2. OPS.

- [Alternative Fuels Infrastructure Directive 2014/94/EU]
- Art. 6.2 & 3
 2. Member States shall ensure, by means of their national policy frameworks, that an appropriate number of *refuelling points for LNG* are put in place at inland ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 31 December 2030. Member States shall cooperate with neighbouring Member States where necessary to ensure adequate coverage of the TEN-T Core Network.
 3. Member States shall designate in their national policy frameworks the maritime and inland ports that are to provide access to the refuelling points for LNG referred to in paragraphs 1 and 2, also taking into consideration actual market needs.

2. OPS.

- Alternative Fuels Infrastructure Regulation - AFIR (EU) 2023/1804

Art. 10 - Targets for shore-side electricity supply in inland waterway ports

Member States shall ensure that:

- (a) at least one installation providing shore-side electricity supply to inland waterway vessels is deployed at all TEN-T core inland waterway ports by 31 December 2024;
- (b) at least one installation providing shore-side electricity supply to inland waterway vessels is deployed at all TEN-T comprehensive inland waterway ports by 31 December 2029.

2. OPS.

- Art. 7.06

2. In berthing areas marked by the sign

B.12 (annex 7), all vessels are **required**

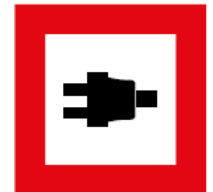
to be connected to an onshore power

supply point in order to fully cover their energy needs while berthed.

3. **Exceptions** to the requirement referred to in the first sentence above may be indicated by an additional rectangular white panel placed under the sign B.12.



B.12 Obligation to use onshore power supply point
(see article 7.06, para. 2)



2. OPS.

- Netherlands: Art. 7.06a Inland Shipping Police Regulations (BPR)

1. Op ligplaatsen waar het teken B.12 (bijlage 7) is geplaatst en een walstroomaansluiting beschikbaar en bedrijfsklaar is, worden schepen aan een walstroomaansluiting aangesloten en wordt de volledige behoefte aan elektrische energie tijdens het stilliggen daaruit gedekt.	1. In berthing areas marked by the sign B.12 (annex 7) and with a shore power connection available and operational , all vessels are required to be connected to an onshore power supply point in order to fully cover their energy needs while berthed.
2. Uitzonderingen op het eerste lid kunnen worden aangegeven op een toegevoegd rechthoekig wit bord, dat onder het teken B.12 is aangebracht.	2. Exceptions to the first paragraph may be indicated by an additional rectangular white panel placed under the sign B.12.
3. Het eerste lid is niet van toepassing op schepen die tijdens het stilliggen uitsluitend van een energievoorziening gebruikmaken, die geen geluid alsmede geen schadelijke gassen en luchtverontreinigende deeltjes veroorzaakt.	3. The first paragraph shall not apply to ships which, while stationary, use only an energy supply that does not produce noise or harmful gases and air-polluting particles.

2. OPS.

- Belgium: not yet in the Inland Shipping Police Regulations (APSB), but in the port regulations:
- Antwerp Port Police Regulations:

Art. 9.2 Walstroom

Het is verboden om aan boord van een binnenschip een generator te gebruiken voor het opwekken van elektriciteit indien het schip een ligplaats heeft ingenomen, waarbij fysisch kan worden aangesloten op walstroomkasten van het Havenbedrijf.

Het gebruik van walstroomelektriciteit moet gebeuren conform de instructies beschreven op de installaties.

Art. 9.2 Shore Power

It is prohibited to use a generator on board an inland vessel to generate electricity if the vessel has taken up a berth and can be physically connected to the Port Authority's shore power boxes.

The use of shore power must be in accordance with the instructions on the installations.

2. OPS.

- North Sea Port (Ghent) Port Police Regulations:

Art. 3.1.6 Gebruik walstroom binnenschepen

1. Indien een binnenschip een ligplaats heeft ingenomen waar fysiek kan worden aangesloten op walstroom voorzien door North Sea Port mag het binnenschip geen gebruik maken van een eigen stroomgenerator aan boord voor het opwekken van de eigen elektriciteitsbehoefte.
2. Degene die walstroom afneemt, houdt zich aan de instructies vermeld op of aan de walstroomkast.
3. Zeeschepen kunnen geen gebruik maken van binnenvaartwalstroomkasten.
4. De havenkapiteinsdienst kan een afwijking toelaten op de verplichting zoals bepaald in lid 1 van dit artikel. De afwijking dient schriftelijk te worden aangevraagd.

Art. 3.1.6 Use of shore power by inland vessels

1. If an inland vessel has taken up a berth where it can be physically connected to shore power provided by North Sea Port, the inland vessel may not use its own on-board power generator to generate its own electricity.
2. Anyone using shore power must comply with the instructions stated on or near the shore power box.
3. Seagoing vessels may not use inland waterway shore power boxes.
4. The harbour master's office may grant an exemption from the obligation set out in paragraph 1 of this article. The exemption must be requested in writing.

2. OPS.

- North Sea Port (Ghent) Port Police Regulations

- exemption (para. 4)
- explanatory notes:

If it can be demonstrated that an inland vessel by using battery packs or 100% CO₂-neutral fuels does not generate any local emissions, an exemption may be requested for that vessel ...

2. OPS.

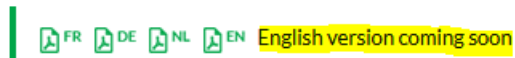
- loading or discharging in port where OPS is mandatory
 - vessel must be (technically) able to do so
 - otherwise: unsuited vessel
- who must check/guarantee this? carrier or shipper?
- what if carrier *believes* that he can demonstrate 100% CO2-neutral alternative, and port doesn't accept this?

3. CDNI.



- <https://www.cdni-iwt.org/>

CONSOLIDATED CONVENTION (OCTOBER 2024)



CONVENTION ON THE
COLLECTION, DEPOSIT
AND RECEPTION OF WASTE
GENERATED DURING NAVIGATION
ON THE RHINE AND
OTHER INLAND WATERWAYS

- 6 Member States:
- Belgium, France, Germany, Luxemburg, Netherlands, Switzerland
- scope of application: Annex I
 - Rhine plus ...
 - BE/NL: all waterways accessible to inland navigation

3. CDNI.

- Danube river
- Danube Commission, DK /TAG 97/15



- Recommendations for Organising the Collection of Ship-generated Waste in Danube Navigation
- inspired by CDNI, but not identical

3. CDNI.

- basic principles:
 - prohibited to (Art. 3)
 - dump or discharge into the waterway
 - waste generated on board
 - any part of the cargo
 - release to atmosphere
 - vapours
 - Member States must install sufficiently dense network of reception stations (Art. 4)

3. CDNI.

- basic principles:
 - carrier, shipper (charterer) & consignee (Art. 11):
 - exercise "vigilance required by the circumstances" in order to:
 - *prevent polluting* the waterway
 - *limit* as much as possible the *quantity* of waste generated on board
 - avoid as far as possible any mixing of the different categories of waste.

- nb.

FR	toute la vigilance que commandent les circonstances
DE	die nach den Umständen gebotene Sorgfalt
NL	de door de omstandigheden vereiste zorgvuldigheid
EN	the utmost vigilance required by the circumstances

3. CDNI.

- nb. Art. 10.03 CEVNI

*The boatmaster, other crew members and other persons on board shall exercise **every** care required by the circumstances in order to avoid polluting the waterway and to restrict to the maximum the amount of waste generated on board and to avoid as far as possible any mixing of the various categories of waste.*

- no mention of shipper/charterer or consignee

3. CDNI.

- basic principles:
 - carrier, shipper (charterer) & consignee are required to comply with their respective obligations under the Implementing Regulation (Art. 13)

3. CDNI.

- Convention (16 substantive provisions + technical provisions) + 'Implementing Regulation'
 - Part A - oily and greasy waste from the operation of the vessel
 - Part B - cargo-related waste
 - Part C - other waste from the operation of the vessel
- reception facilities ...
- who pays?

3. CDNI.

- Part A - oily and greasy waste from the operation of the vessel
 - disposal charge levied on gas oil (Art. 6)
(10.00 euros (plus VAT) per 1000 litres of gas oil supplied)
 - International Clearance and Coordination Body (Art. 10)
- Part B - cargo-related waste
 - **charterer or the consignee** shall bear the cost of unloading residual cargo, washing the vessel, reception and disposal of cargo-related waste (Art. 8.1)
 - **charterer** shall bear the cost of degassing (Art. 8.1a)
 - if charterer & consignee of previous cargo complied with their obligations, but vessel nevertheless not sufficiently clean, **carrier** shall bear the cost (Art. 8.2)

3. CDNI.

- Part C - other waste from the operation of the vessel
 - domestic refuse: no specific charge (Art. 7.1)
 - 'other special waste as defined in Part C' (NL: *klein gevaarlijk afval*): Contracting States must set up a financing system (Art. 7.2)
 - slops: charged to the boatmaster separately

3. CDNI.

- CDNI Part B - cargo-related waste
- interaction with CMNI?
- different terminology/definitions:

CDNI	CMNI
“Carrier”: the party responsible for transporting goods on a professional basis	“Carrier” means any person by whom or in whose name a contract of carriage has been concluded with a shipper
“Charterer”: the party issuing the transport order	“Shipper” means any person by whom or in whose name or on whose behalf a contract of carriage has been concluded with a carrier
“Consignee”: the party authorised to take delivery of the cargo	“Consignee” means the person entitled to take delivery of the goods

3. CDNI.

- **Art. 3.3 CMNI**

The carrier shall decide which vessel is to be used. He shall be bound, before and at the beginning of the voyage, to exercise due diligence to ensure that, taking into account the goods to be carried, the vessel is in a state to receive the cargo, is seaworthy and is manned and equipped as prescribed by the regulations in force and is furnished with the necessary national and international authorizations for the carriage of the goods in question.

- **Art. 7.02 CDNI-IR**

(1) The carrier shall make the vessel available to the charterer under an unloading standard such that the cargo may be transported and delivered unimpaired. As a general rule, this means the “swept hold” or “stripped tank” unloading standard, with the vessel free of any handling residues.

(2) A more demanding unloading standard or washing may be agreed in advance, in writing. (...)

3. CDNI.

- **Art. 6.2 CMNI**

The shipper shall furnish the carrier in writing, before the goods are handed over, with the following particulars concerning the goods to be carried:

- (a) dimensions, number or weight and stowage factor of the goods;
- (b) marks necessary for identification of the goods;
- (c) nature, characteristics and properties of the goods;
- (d) instructions concerning the Customs or administrative regulations applying to the goods;
- (e) other necessary particulars to be entered in the transport document.

- **Art. 7.09 CDNI-IR**

The shipper shall indicate the following information in the transport agreement and transport documents:

- the name and four-digit number in accordance with Appendix III of each type of goods offered for transport and,
- the UN number in accordance with Appendix IIIa and,
- the variable AVFL value (depending on the composition of the mixture) if this is not specified in column 3 of Tables I to III of Appendix IIIa.

3. CDNI.

- Art. 6.4 CMNI

Subject to the obligations to be borne by the carrier, the shipper shall load and stow the goods and secure them in accordance with inland navigation practice unless the contract of carriage specifies otherwise.

- Art. 7.03 CDNI-IR

(1) The loading and unloading of a ship also includes the measures to discharge remnants as well as

a) in the case of washing, for washing and

b) in the case of degassing, for degassing

which are required under this Part B. Residual cargo must, as far as possible, be added to the cargo.

(2) When loading, the charterer must ensure that the vessel remains free of handling residues. Should such residues be produced nevertheless, the charterer shall ensure their removal after loading, unless otherwise agreed.

(3) When unloading, the consignee must ensure that the vessel remains free of handling residues (...)

3. CDNI.

- Art. 7.04 CDNI-IR

(1) For *dry* cargoes, the *consignee* must ensure that, after unloading, the hold is returned in a swept or vacuumed condition in accordance with the unloading standards and the requirements concerning deposit and reception set out in Appendix III.

He shall be required to collect any residual cargo and any handling residues produced on board the unloaded vessel.

For *liquid* cargoes, the *charterer* must ensure that, after unloading, the tank is returned in a stripped condition. *Unless provided for otherwise* in the transport contract, the *boatmaster* shall carry out the unloading, including the unloading of residual cargo, using a stripping system. (...)

3. CDNI.

- Art. 7.04 CDNI-IR

(2) if wash water cannot be discharged into the waterway / vapours cannot be released to atmosphere:

- * consignee (for dry cargo)

- * charterer (for liquid cargo)

must take care of washing / degassing

- Art. 7.05 CNI-IR

- dry cargo: consignee must receive the wash water / assign a reception station in consultation with the carrier

- liquid cargo: charterer must assign **in the contract of carriage** a reception station for the wash water / vapours

- reception station should be located near the handling facility or en route to the vessel's next place of loading or unloading

3. CDNI.

- Art. 7.06 CDNI-IR

- (1)-(2) costs of washing, receiving the wash water, etc. to be borne by the consignee (dry cargo) or charterer (liquid cargo)

- dry cargo:

The same shall also apply in respect of the costs incurred for **rainwater** that has penetrated the holds after loading has commenced and before completion of the unloading referred to in paragraph 1 of Article 7.03, where there has been no agreement to transport the cargo in a covered hold.

In the case of exclusive transport for the same charterer, the latter shall be required to collect, at his expense, prior to loading, the rainwater that has penetrated the holds since the end of the previous unloading.

- (3) The cost of depositing wash water from the holds and cargo tanks or of degassing of cargo tanks that do not comply with the prescribed unloading standards shall be borne **by the carrier**.

3. CDNI.

- Art. 6.4 CMNI

Subject to the obligations to be borne by the carrier, the shipper shall load and stow the goods and secure them in accordance with inland navigation practice *unless the contract of carriage specifies otherwise*.

- Art. 7.07 CDNI-IR

The charterer and the consignee may also agree between themselves a distribution of their obligations that is different to that provided for in the present Annex *on condition that this does not impact on the carrier*.