



Coverphoto: Beatrixhaven | Eemshaven Loading salt at Nobian jetty in Zeehavenkanaal | Delfzijl

02

Nautical Directory



Foreword

Foreword

Groningen Seaports PLC

Ports and sites

Groningen Seaports is the economic operator, developer and port authority for the port of Delfzijl, Eemshaven and the adjoining industrial sites. The organisation provides the complete package of port services to its industrial and commercial clients, from logistics and infrastructure services to the issue and maintenance of the sites in both port regions.

As well as the two excellently equipped ports, Groningen Seaports manages the industrial sites around the ports and at other areas in the Eemdelta. Various clustered business sites are located on the sites, including a chlorine-related chemicals cluster with Nouryon and its alliance partners as important players. Also, a large part of Eemshaven has been earmarked for the development of energy-related industry with large energy producers such as ENGIE, NorNed, Vattenfall, TenneT, and RWE. And that attracts energy consumers as well: Google builds its largest data center of Europe in Eemshaven.

Your new business location in Delfzijl or Eemshaven?

With more than 500 hectares of land available there is certainly plenty of space for you to get down to business. Both seaports have good rail, road and water connections, which provide very easy access to your location. If you operate in the offshore wind business or the data centre sector, then Eemshaven is the best option for you. Delfzijl is the right location for the chemical industry or circular economic activities. We'll be pleased to help you explore the options.

Port of Delfzijl

The port of Delfzijl consists of an outer basin and an inner basin. Handelshaven is the logistic heart of the port area and is located near the old city centre of Delfzijl. The eastern part of this port is destined for professional shipping and the western part for recreational shipping. Handelshaven is accessed via the 6km long Zeehavenkanaal. The north side of this canal consists of a breakwater, where 14 of Delfzijl's total of 19 wind turbines generate green energy. To its south there are various loading and unloading facilities for the purpose of transshipping chemical products or raw materials for the chemical industry.

Facts & figures

- Transshipment 6,034,855 tonnes (2021)
- Surface area: 1,478 hectares
- Available: approx. 360 hectares
- Quay length: 850 metres
- Water depth: 9 metres
- Depth of inner basins: 5 metres
- 15% of total Dutch chemical production

Eemshaven

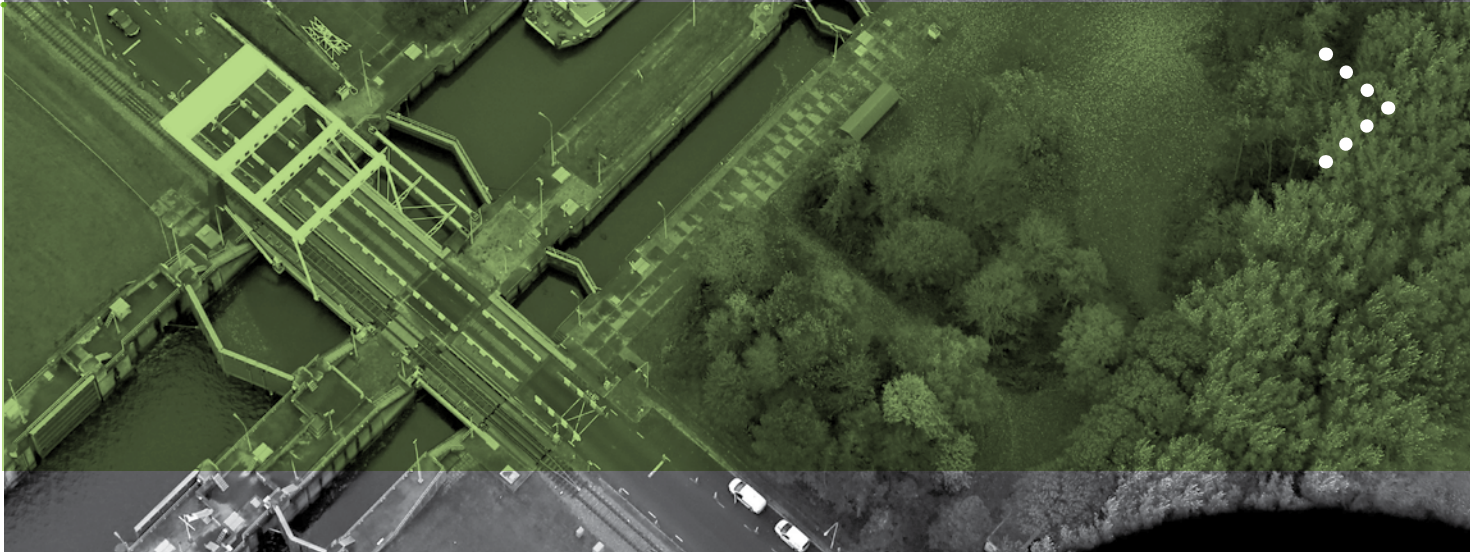
Eemshaven is a deepwater port accessible for panamax bulkcarriers up to 14 metres draft (Wilhelmina basin). There is more than 5 kilometres of quay distributed over 4 basins. Eemshaven has multimodal access and with quays as well as a public roro facilities, ramps, a jetty and various logistics service providers it has all the facilities for transshipping goods.

Facts & figures

- Transshipment 7,272,407 tonnes (2021)
- Surface area: 1,324 hectares
- Available: 207 hectares
- Quay length: 5,120 metres
- Water depth: 14 metres
- 1/3 of total Dutch energy production



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The Port Authority of Delfzijl and Eemshaven does not accept any liability for possible errors in this publication. Some data may be subject to changes in the course of this year. Charts in this publication are not intended for navigation purposes.

Installation vessel Innovation transporting monopiles and transition pieces for Hornsea Two, Doekegatkanaal | Eemshaven

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Nautical Directory



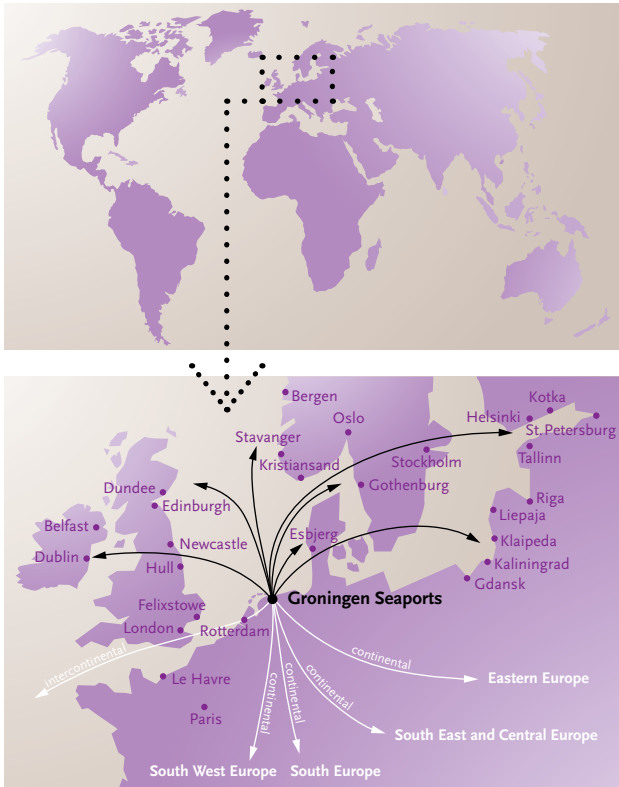
Nautical Directory

Nautical Directory

1 | Nautical information

1.1 Location and distances

The Groningen Seaports are located at the mouth of the River Ems and near the main North Sea shipping route in the Le Havre-Hamburg Range. Delfzijl: Latitude 53°20'N, Longitude 06°56'E. Eemshaven: Latitude 53°27'N, longitude 06°50'E. From Delfzijl to Emden is 10 nautical miles via Paapsand-Süd. From Delfzijl harbour to the pilot station is 37 nautical miles via Paapsand-Süd. From Delfzijl harbour to Eemshaven is 15 nautical miles via Paapsand-Süd. From Eemshaven quays to the pilot station is 23 nautical miles via Westereems.



1.2 Charts and guides

For approaches to Delfzijl and Eemshaven, the following charts and guides are available:

1.2.1 Charts

- Netherlands government – Charts Nos 1460 and 1555 + 1812.6.
- British Admiralty – Charts Nos 3509 and 3510.
- German – Charts Nos 90 and 91.

1.2.2 Pilots

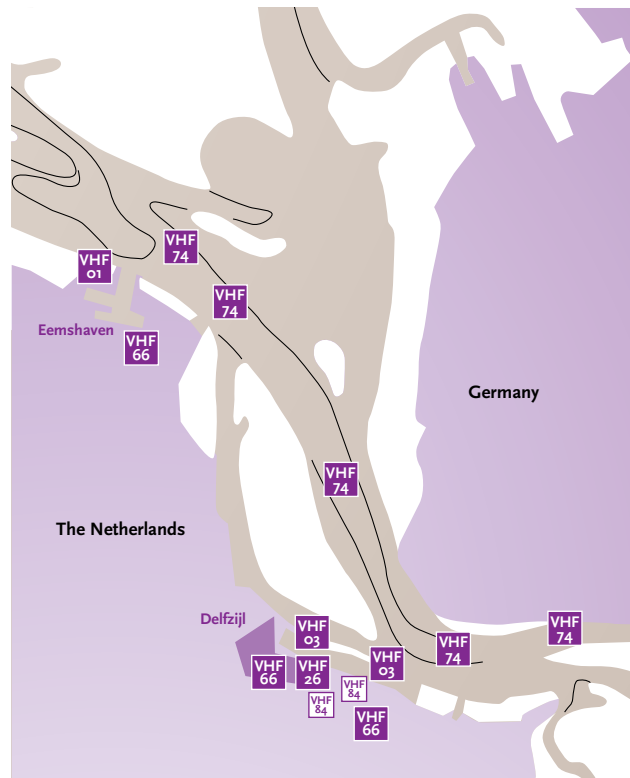
- Zeemansgids voor de Nederlandse kust (HP 1).
- British Admiralty, Np 55 North Sea Pilot (East).
- Nordsee Handbuch östlicher Teil Nr. 2006.

1.2.3 List of lights

- Lichtenlijst voor Nederland.
- British Admiralty List of Lights, Volume B (HP 75).
- Leuchtf Feuer Verzeichnisse und Signalstelle, Teil III A Nr. 4003.

1.2.4 Tidal information

- Stroomatlas Waddenzee Oost (HP 18), Noordzee (HP 19).
- Getijtafels voor Nederland.
- Admiralty Tide Tables, European Waters.
- Waterstanden en stromen (HP 33).



Station

VHF Channel

| | |
|--|----|
| VTs Eemshaven | 01 |
| VTs Delfzijl | 03 |
| Central Reporting Station Waddenzee | 04 |
| Towing service Delfzijl/Eemshaven | 06 |
| Towing service Emden, ship to ship traffic | 10 |
| Sea locks Emden, lock Leer, lock Papenburg | 13 |
| Ems Traffic | 15 |
| Ems/Sperwerk | 15 |
| Sealocks Delfzijl | 26 |
| Eemskanaal, all bridges + Groevesluis | 64 |
| Port control Delfzijl/Eemshaven | 66 |
| SAR (Search and Rescue) | 67 |
| Ems Traffic | 74 |
| Ems Traffic | 74 |
| Weierwerderbridge/Heemskesbridge | 84 |

1.3 Tides and currents

All depths in this directory are relative to Normal Amsterdam Level (NAP). Tidal movement is diurnal. LLWS at Delfzijl lies 2.03 metres below NAP, LLWS at Eemshaven lies 1.80 metres below NAP.

1.3.1 Delfzijl tides

| | HW (metres) | LW (metres) | Mean range (metres) |
|------------------|----------------|----------------|------------------------|
| Mean spring tide | + 1.53 m | - 1.86 m | 3.39 m |
| Mean tide | + 1.40 m | - 1.66 m | 3.06 m |
| Mean neap tide | + 1.19 m | - 1.40 m | 2.66 m |

1.3.2 Eemshaven tides

| | HW (metres) | LW (metres) | Mean range (metres) |
|------------------|----------------|----------------|------------------------|
| Mean spring tide | + 1.34 m | - 1.57 m | 2.91 m |
| Mean tide | + 1.22 m | - 1.40 m | 2.62 m |
| Mean neap tide | + 1.02 m | - 1.19 m | 2.21 m |

To calculate the tide for Eemshaven, use the tide-table for Delfzijl. High water at Eemshaven will be 40 minutes earlier and 0.22 metres lower than in Delfzijl. Low water at Eemshaven will be 46 minutes earlier and 0.28 metres higher than in Delfzijl. Note that easterly winds usually influence available water depths. All draughts indicated in this chapter are for normal weather conditions and dredging allowance.

Tidal currents

| Location | Borkum | Meeuwstaart roads | Doekegat | Eemshaven | Hond | Paap roads | Oterdum |
|-------------|--------------|----------------------|--------------|--------------|--------------|---------------|---------|
| -6 06.08 | 130 08.10 | 135 09.12 | 100 04.06 | 310 01.03 | 060 01.01 | 000 02.04 | 275 |
| -5 21.29 | 130 26.30 | 130 13.19 | 120 19.24 | 130 16.20 | 165 15.18 | 180 04.05 | 080 |
| -4 20.31 | 130 21.29 | 130 15.20 | 110 18.28 | 125 18.30 | 160 17.22 | 180 16.22 | 090 |
| -3 18.24 | 130 16.22 | 130 11.16 | 110 15.22 | 120 15.23 | 160 10.23 | 170 11.19 | 090 |
| -2 12.19 | 140 13.18 | 130 07.09 | 120 11.17 | 130 09.15 | 175 14.18 | 175 04.18 | 100 |
| -1 04.07 | 130 06.07 | 135 03.04 | 120 07.10 | 130 06.08 | 150 09.12 | 190 07.14 | 090 |
| HW 04.06 | 305 04.05 | 305 02.04 | 120 | nil 02.03 | 160 05.06 | 135 03.08 | 095 |
| +1 16.26 | 305 12.19 | 305 10.15 | 300 02.10 | 300 06.13 | 335 07.09 | 340 02.06 | 275 |
| +2 20.30 | 310 18.24 | 315 17.27 | 300 15.18 | 300 16.22 | 330 21.27 | 350 11.17 | 280 |
| +3 20.30 | 310 18.24 | 310 17.29 | 300 20.25 | 300 21.25 | 340 23.30 | 335 16.22 | 280 |
| +4 15.26 | 310 16.23 | 315 15.26 | 300 17.25 | 310 17.22 | 340 21.27 | 340 10.25 | 275 |
| +5 09.22 | 310 16.23 | 315 09.17 | 310 12.19 | 300 11.21 | 345 16.21 | 340 08.16 | 260 |
| +6 03.12 | 310 09.12 | 325 04.06 | 300 07.10 | 315 06.09 | 340 10.13 | 345 03.04 | 265 |

- -6 Time reference to HW standard port Delfzijl
- 130 Mean direction of tidal stream in degrees
- 06.08 Rate of current in 10ths of knots at mean neap tide (06) and mean spring tide (08)

Source: Dienst der Hydrografie (HP 18 - January 1992)

1.4 Approaches

From the pilot station at Westereems fairway buoy, vessels bound for Delfzijl sail via Westereems, Ranselgat, Doekegat and Oost Friesche Gaatje to the entrance near Oterdum. Vessels bound for Eemshaven sail via Westereems, Ranselgat and Doekegat to the entrance of Eemshaven.

- Distance from pilot station to Delfzijl quay:
37 nautical miles.
- Distance from pilot station to Eemshaven quay:
23 nautical miles.

The Zeehavenkanaal in Delfzijl offers vessels an operational draught of about 9.0 metres under mean HW conditions. At present, Eemshaven offers an operational draught of about 14 metres under mean HW conditions. With respect to the operational draught for both the ports, a keel clearance of 10 per cent of the draught is applicable.

Anchorage at Delfzijl: vessels up to 100 metres long which have to anchor outside the piers can anchor on the Oterdum roads north-east of the harbour entrance.

Larger vessels or vessels carrying dangerous cargo should anchor in the Doekegat or Oude Westereems near Eemshaven.

Request for anchorage should be applied at the Vessel Traffic Centre Ems, VHF Channel 74. Anchorage is forbidden in the ports of Delfzijl and Eemshaven.

2 | Services

2.1 Vessel traffic services

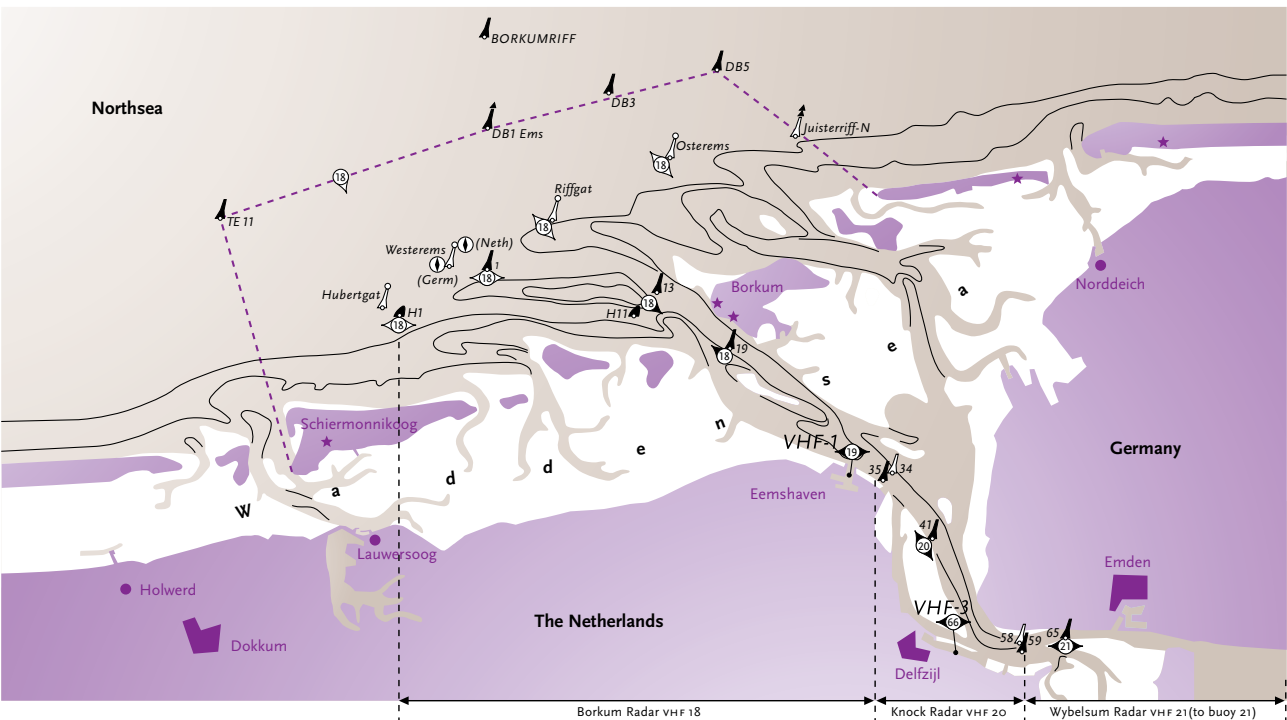
2.1.1 River Ems

An integrated German/Dutch radar chain has been installed along the River Ems comprising the radar stations Borkum (Germany), Oudeschip 1+2 (Netherlands), Knock (Germany) and Wybelsum (Germany). This radar chain is controlled by Vessel Traffic Centre Ems.

Radar assistance can be provided when visibility is less than 2,000 metres and/or when the pilot cutter is cruising off Borkum in strong winds. Radar stations operate on a regular basis. Guidance and assistance can be provided according to the table below.

Guidance and assistance

| Station | Area | VHF Channel |
|--------------|--|-------------|
| Borkum radar | River Ems from Westereems buoys 1/2 or Huibertgat buoys H1/H2 to buoy 35 | 18 |
| Ems Traffic | River Ems from buoy 35 to entrance port of Delfzijl buoys 56/57 | 74 |
| Ems Traffic | River Ems from buoys 56/57 to entrance port of Emden | 74 |



River Ems and Estuary

Sailing Report

Seagoing vessels:

- Vessel's name
- Position
- Dimensions
- Port of destination

Position Report

Seagoing vessels including push barges with length > 40 m:

- Vessel's name
- Position
- Speed
- Passage time reporting point

Lighthouse

Buoy lit

Buoy unlit

2.1.2 Delfzijl and Eemshaven

A modern VTS centre has been constructed in both Delfzijl and Eemshaven. Up-to-date traffic information, guidance and radar assistance are provided on a 24 hour basis using four radar installations, more than twenty five CCTV cameras and two hydro/ meteorological units.

Traffic information

| | Area | VHF Channel |
|-------------------------|--|-------------|
| Regular port operations | Delfzijl/Eemshaven Oosterhornhaven, Farmsumerhaven | 66 |
| VTS | VTS Delfzijl (callsign) | 03 |
| | VTS Eemshaven (callsign) | 01 |
| General information | Delfzijl/Eemshaven Oosterhornhaven, Farmsumerhaven | 66 |
| | Provincial sea locks | 26 |
| | Weiwerderbridge and Heemkesbridge | 84 |

2.1.3 Harbourmaster

The Harbourmaster of Groningen Seaports is responsible for the day to day running of the Nautical Service Centre. The Harbourmaster is appointed by the managing director of Groningen Seaports and his specific task is to ensure that the handling of the traffic and cargo in the port of Delfzijl and the Eemshaven is coordinated safe, efficient, and environmentally sustainable.

He also advises the management of Groningen Seaports regarding nautical affairs and is responsible to the Mayors of the Municipalities of the ports, regarding ISPS issues and safety issues when these can affect the surrounding population. When safety issues involve more than one Municipality the Province of Groningen is also consulted.

The Harbourmaster liaises closely with Rijkswaterstaat and the Wasser und Schifffahrtsamt when special transports are planned or in case of incidents involving ships that will transit the Eems.

2.1.4 Nautical Service Centre (NSC)

The NSC is responsible for planning and co-ordination of shipping movements in and around the port of Delfzijl and Eemshaven and is manned on a 24 hour basis. The VTS authorities of the River Ems (Rijkswaterstaat) and Groningen Seaports work closely together in the NSC, which forms the hub of a network keeping in contact with vessels and organizations active in the port area and providing ship related services.

Groningen Seaports operates a vessel traffic management system (VTMS) which consists of a vessel traffic service (VTS) and a vessel information system (IVS). The IVS allows instantaneous and fast interchange of data not only between similar national networks but also between local facility services, ship agents, government services, port state control, etc. The VTS monitors shipping movements constantly, covering the roads of, and approaches to, Delfzijl and Eemshaven, as well as main fairways and adjacent harbour basins.

A primary communications system is available for the 'Ems Traffic' radar chain along the River Ems, with a direct line to the central VTS station at Knock (Germany). All VTS related work is performed at a fully equipped console desk.

Communication procedures

Information

Being at the centre of activity, VTS operators are able to pass on a lot of key information to users of the VTS network. Although a great deal of information is available at the NSC, only required information will be passed on in accordance with VTS communications procedures.

Responsibility

The shipmaster is responsible for safe navigation in all circumstances. The VTS operator only gives information that can help the shipmaster in making his own decisions. Existing traffic regulations will always prevail.

VHF channel

Ship masters must pay attention to the VHF channel of the sector they are passing through. The sector's VHF channels are displayed on signs along the fairway. In this way, vessels can stay informed about the traffic situation in the sector where they are navigating.

Traffic information

VTS operators will contact vessels when necessary – for example, when vessels are close to each other but cannot see one another. Ship masters can also contact VTS operators, but only if they need essential traffic information and the relevant information is not at hand.

Navigation assistance

Navigation assistance can be provided in Delfzijl and Eemshaven.

Traffic directions

These are issued in the form of instructions by the competent authorities and can be given by them or on their behalf by the VTS operator on the relevant sector's VHF channel.

General information/shipping broadcast

General information not directly concerning nautical traffic information can be given on VHF Channel 66. On request a variety of information can be given, these are up-to-date reports on meteorological conditions, tidal levels, horizontal visibility, the fairway, the sea locks, berth occupation, dredging and other work in progress, special transports, a weather forecast etc. Vessels must switch over to this channel when instructed to do so by the VTS operator. When switching over to this channel on their own initiative, vessels should first report this proposed action on the sector's VHF channel. Always keep a listening watch to the relevant sector's VHF channel.

Radio discipline

Correct radio discipline means that communications should be brief. Arrangements with other vessels concerning shipping regulations can also be made directly on the sector's VHF channel or via the VTS operator. The VTS operator may disconnect direct contact between vessels in the interest of safety. He will, of course, report this immediately to shipping in the sector.

Official languages

English and Dutch are the official languages for communication between vessels and the traffic centre. This rule may be deviated from only when safety is at risk.

2.2 Pilotage

2.2.1 Compulsory pilotage area

Regulations for maritime traffic and pilotage in Dutch waters are laid down by the Loodsplichtwet (Pilotage Act) and the Scheepvaartverkeerswet (Maritime Traffic Act). The Scheepvaartverkeerswet states that masters of seagoing vessels must use the services of a pilot when navigating on a fairway mentioned in this Act.

The River Ems, except the area south of Geisedam, but including the Port of Delfzijl, the fairway from the locks at Delfzijl into the Oosterhornhaven, the Port of Eemshaven and a part of the territorial sea bordered by a line from position:

53°34'.7 N, 06°21'.9 E to
53°34'.9 N, 06°13'.7 E to
53°37'.1 N, 06°19'.5 E to
53°39'.0 N, 06°27'.1 E and to
53°37'.5 N, 06°31'.2 E,

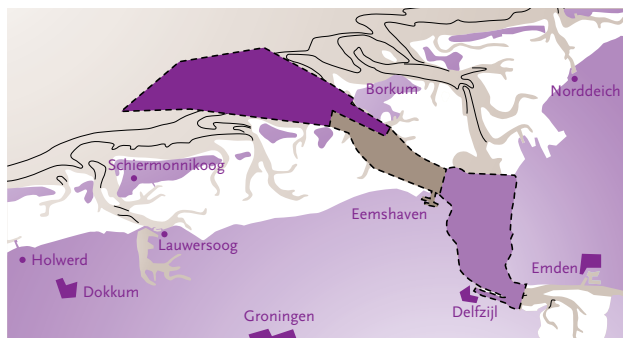
which are mentioned as compulsory pilotage areas.

Vessels obliged to use pilot services on these fairways

- Seagoing vessels longer than 95 metres.
- Seagoing vessels wider than 13 metres.
- Seagoing vessels with a draught more than 7 metres (Eemshaven)
- Seagoing vessels with a draught more than 6 metres (Delfzijl)
- Vessels built for – or adjusted to – and used for transport of oil, gas or chemicals in bulk and fully or partially loaded. Even when these are empty but not yet degassed or when dangerous residue has not yet been removed, they are subject to general compulsory pilotage.
- Vessels carrying such quantities of dangerous cargo as established by the Ministry of Transport and Public Works.

Pilotage exemptions

There is a possibility to obtain exemption (please see map below).



Sailing area

- Westereems - Borkum
- Borkum - Eemshaven
- Eemshaven - Delfzijl

Compulsory pilotage degree

| | Pilot exemption limit | | | Pilot exemption limit | | |
|---|-----------------------|------|-----|-----------------------|------|-----|
| | L 155 | B 25 | D 7 | - | - | - |
| | L 125 | B 20 | D 7 | - | - | - |
| | L 95 | B 13 | D 7 | L 115 | < 13 | D 7 |
| | L 95 | B 13 | D 6 | L 115 | < 13 | D 6 |

2.2.2 Pilotage dues

All vessels applicable to compulsory pilotage are obliged to pay pilotage dues. Vessels using the services of a pilot voluntarily must also pay pilotage dues.

2.2.3 ETA and ETD regulations

Pilotage for both Delfzijl and Eemshaven is performed by a fast tender from Eemshaven. Therefore, vessels approaching from the sea should inform Delfzijl pilot station of their estimated time of arrival (ETA) at Westereems racon buoy in MET at least 12 hours in advance if not immediately after leaving last port of departure. If an ETA deviates more than one hour from the latest ETA message, a new message must be sent six hours prior to arrival at Westereems buoy.

Vessels must provide the following information in an ETA report

- Name of vessel.
- Call sign.
- ETA at Westereems buoy.
- Ship's speed in knots.
- Deepest draught upon arrival in decimetres.
- Ship's length overall in metres.
- Freeboard in decimetres.
- Required tug assistance.
- Particulars, if any, with regard to tender coming alongside and safe pilot transfer.

ETA report

| How? | When? | |
|-----------|--------------------------------------|--|
| Telephone | +31 (0)596 61 36 72 | 12 hours prior to arrival at Westereems racon buoy |
| Fax | +31 (0)596 61 03 06 | |
| Satcom C | Mailbox 31 8441 msg Type: PSTN | |
| Telephone | +31 (0)596 61 36 72 | 6 hours prior to arrival at Westereems racon buoy; and if the ETA is to be corrected more than 1 hour |
| Fax | +31 (0)596 61 03 06 | |
| VHF | Channel 19 | |
| Satcom C | Mailbox 31 8441 msg Type: PSTN | |
| VHF | Channel 19 | 4 hours prior to arrival contact Delfzijl pilot station |

Waiting time of more than 30 minutes will be charged. On departure from Delfzijl or Eemshaven or shifting in one of these ports, a pilot can be obtained from Delfzijl pilot station, with a notice of one and a half hours prior to departure, through VHF Channel 87; telephone +31 (0)596 61 36 72; fax +31 (0)596 61 03 06.

Radar assistance

Depending on the weather, the pilot may embark or disembark at an inward position off Borkum Island. Delfzijl pilot station will inform the vessel of this 'pilotage under Borkum' situation as soon as contact has been made.

In that case, for certain vessels (see table next page) radar assistance is available on the seabound part of the passage. This so-called Radar Beratung is provided by the German pilotage and inbound vessels can request it at Ems-traffic Borkum via VHF Channel 18 at a notice of two hours prior to arrival at Westereems racon buoy.

The option of radar assistance is not available to

| | |
|--------------------------------|---|
| All ships | > 140 metres in length or > 23 metres in breadth |
| Car carriers and RoRo vessels | > 140 metres in length or > 23 metres in breadth |
| Tankers as in SRE art 21 sub 1 | > 120 metres in length or > 18 metres in breadth |

For these categories of vessels, the options are

- A vessel bound for Delfzijl or Eemshaven may order a pilot on board at a previous port of call. Transport expenses and a daily tariff will be charged.
- A vessel departing from Delfzijl or Eemshaven may carry the pilot to the next port of call or suitable pilot station. Transport expenses and a daily tariff will be charged.

Vessels leaving an anchorage or crossing an inward limit of a fairway with compulsory pilotage must also apply for a pilot at least two and a half hours before ETD anchorage or ETA inward limit.

If notice of an intended departure or shifting is given less than one and a half hours before departure or shifting, the RLC-N will try to provide the vessel with a pilot as soon as possible. Vessels should be aware that this may take up to one and a half hours following receipt of the message.

Note: In bad weather, the pilot station may be withdrawn upstream from the River Ems estuary and may cruise off to Borkum between buoys Nos 13 and 19.

2.3 Towage

Bijma Towage and Wagenborg Towage have general permission from Groningen Seaports to give tug assistance to vessels calling at Delfzijl and Eemshaven. Below the capacities of the tugs are specified.

Bijma Sleepdienst & Scheepsbevrachting

| | Gruno | Gruno II | Gruno III | Gruno IV | Gruno V |
|--------------------|-------|----------|-----------|----------|---------|
| Capacity (hp) | 480 | 625 | 775 | 1,960 | 1,280 |
| Bollard pull (ton) | 5.8 | 8 | 9.8 | 28 | 22.8 |

Wagenborg Sleepdienst

| | Water-geus | Water-man | Water-poort | Water-stad | Water-straat | Water-stroom |
|--------------------|------------|-----------|-------------|------------|--------------|--------------|
| Capacity (hp) | 1,775 | 4,400 | 1,258 | 2,200 | 5,900 | 5,000 |
| Bollard pull (ton) | 25.5 | 56 | 15 | 30 | 56 | 56 |

Tug assistance must be applied for in advance

| | During office hours | Outside office hours |
|-----------|---------------------|----------------------|
| Delfzijl | 1 hour | 1.5 hour |
| Eemshaven | 1.5 - 2 hours | 2.5 - 3 hours |

Outside office hours, requests for tug assistance must be made to the Groningen Seaports Nautical Service Centre.

2.4 Boatmen

The Boatmen Association of Delfzijl and Eemshaven (BVD/E) is a member of the Dutch Boatmen's Association and the European Boatmen's Association and meets the requirements of these associations. The BVD/E provides mooring and unmooring services to seagoing vessels calling at Delfzijl and Eemshaven.

The main service to shipping in this area is assistance with mooring, unmooring and shifting. Other services rendered operating bridges, providing fresh water and supervising mooring. In addition, boatmen may be asked to assist with placing vessels in dry dock.

The BVD/E has three (two +one backup) motor tenders, one in Delfzijl and one in Eemshaven, equipped with VHF transceivers to maintain communications with the vessel in question. These tenders can be used on request in the mooring and unmooring or shifting procedure. They can also assist in underwater surveys and for bringing stores or people to vessels at anchor off Delfzijl and Eemshaven.

On request, the BVD/E can provide mooring masters who will assist the ship's crew in mooring, unmooring or shifting. They will also stay in contact with boatmen on shore so that mooring and unmooring procedure can be carried out quickly, easily and safely.

For vessels navigating inland waterways, the BVD/E provides canal pilots who bring vessels to berths in the Eemskanaal, Winschoterdiep and Farmsumerhaven. A canal pilot can also be provided for vessels sailing to Groningen through the Eemskanaal.

The Nautical Service Centre (NSC) of Groningen Seaports co-ordinates all activities of the BVD/E. The Boatmen stay in contact with the NSC at all times using modern communication equipment and also have contact with vessels via their mobile VHF transceivers.

The ship master and/or pilot must apply for assistance of boatmen for mooring or unmooring **at least one hour before arrival** at the berth or before departure.

2.5 Border control

The Koninklijke Marechaussee (Military Police) generally performs border control duties in the ports of Delfzijl and Eemshaven. All ships with destination Groningen Seaports will be checked. The ship master is obliged to co-operate during border control duties.

What the master should do when his ship arrives at Groningen Seaports

- Fill in the crew list and/or a passenger list in duplicate and hand both copies to the officer of the Koninklijke Marechaussee.
- If the master is aware of any stowaways on board his vessel, he must inform the Koninklijke Marechaussee as soon as possible.
- If there are any changes to the crew during his vessel's stay at Groningen Seaports, the master must contact the office of the Koninklijke Marechaussee as soon as possible. After the check, both crew lists will be stamped. One crew list stays on board the vessel and one must be kept by the captain or master as long as the vessel is in port.

The master must inform the office of the Koninklijke Marechaussee two hours in advance of the ETD of his vessel. This is a personal responsibility of the master.

2.6 Dutch Customs

The Customs Administration performs a variety of activities in the ports: collecting import duty, inspecting the transport of waste, tracking down drugs and checking motor vehicles.

In brief, the Dutch Customs Administration

- Inspects goods that are about to enter, leave or cross Dutch territory.
- Levies and collects taxes and domestic excise.
- Contributes to the regulation of the Dutch and European market.
- Performs tasks to help protect the quality of life.

2.7 Port reception facilities

For the disposal and collection of waste, the Port Waste Plan is applicable in the ports of Delfzijl and Eemshaven. This plan details the collection of waste and the reception facilities available.

Waste disposal at Groningen Seaports requires completing a form, to be downloaded via www.groningen-seaports.com. Actual and detailed information regarding the disposal of waste can be obtained via the Nautical Service Centre of Groningen Seaports.

Waste collectors

| Waste collector | Phone | Annex I | Annex II | Annex IV | Annex V Small dangerous waste | Annex V Domestic waste | Annex VI |
|-----------------------------|---------------------|---------|----------|----------|--|------------------------------|----------|
| International Slop Disposal | +31 (0)223 63 21 77 | X | X | X | X | X | X |
| Suez | +31 (0)598 69 66 33 | - | - | X | - | X | - |
| Bek & Verburg | +31 (0)596 74 50 27 | - | - | - | X | X | - |
| Reym | +31 (0)598 65 95 00 | X | X | X | X | X | X |
| Renewi | +31 (0)50 316 88 88 | - | - | - | X | X | - |
| Steenhuis Recycling bv | +31 (0)597 41 20 33 | - | - | - | - | X | - |
| Classificeerbedrijf Joosten | +31 (0)596 61 81 00 | X | X | X | - | - | - |
| Drecht Tankcleaning bv | +31 (0)78 612 09 76 | X | X | X | X | X | - |
| NNRD | +31 (0)512 33 43 34 | - | - | - | X | X | - |
| Wenau | +31 (0)513 65 79 00 | X | - | - | - | - | - |

Disposing and paying

In accordance with the law, sea-going vessels must pay an indirect contribution for the collection and processing of ship-generated waste. Vessels entering a port thus pay a charge; even if they do not dispose any waste. After payment of the fee, vessels receive a 'right to dispose'. This right is measured according to an amount which depends on the vessel's gross tonnage (gt) (see table below).

Port Waste Facilities (disposing and paying)

| GT-class | Indirect fee* | Right to discharge |
|-----------------|---------------|--------------------|
| Fishing vessels | 7.50 | - |
| < 100 | 15 | - |
| 100 - 2,000 | 60 | 300 |
| 2,001 - 3,000 | 120 | 400 |
| 3,001 - 6,000 | 195 | 500 |
| 6,001 - 10,000 | 305 | 750 |
| > 10,000 | 410 | 1,000 |

* Exclusive 20 euro administration costs.

The fees are subject of an annually adjustment. Up to date rates and rights can be requested from the Nautical Service Centre of Groningen Seaports or viewed at the website.

Claiming of disposal rights

Vessels dispose the waste with one or more collectors. The complete invoice is paid to the collectors by the agent, captain, or ship owner. The collector(s) send a copy of the bill together with the S-form to Groningen Seaports. In its turn Groningen Seaports will refund 'right to dispose' to the vessel via the regarding agent, captain, or ship owner.

Disposal of waste

The port waste facilities in Delfzijl and Eemshaven are equipped to handle annex I, IV, V waste. In all classes, the waste will be collected in accordance with the environmental and safety regulations. For a timely collection of the waste it is to be advised to notify the – by the port authority appointed – collector(s) as soon as possible. The website of Groningen Seaports provides the latest information on these companies.

3 | Description of the ports

Groningen Seaports comprises the ports of Delfzijl and Eemshaven. The port of Delfzijl offers general cargo transshipment facilities and hosts in its near surroundings a chemical cluster (base chemicals) and (light) metallurgic industry, and various SME business parks.

Eemshaven contains a park dedicated to the production of energy. Moreover a huge recycling industry developed in this port which basically structures cargo transshipment and storage facilities for bulk, ro-ro, and general cargo. The sections below detail the inferior parts of the ports.

3.1 Port of Delfzijl

The Port of Delfzijl consists of an outer harbour and inner harbour.

The outer harbour is divided into three sections

- Zeehavenkanaal
- Handelshaven
- Damsterhaven

The inner harbour is divided into three sections

- Farmsumerhaven
- Eemskanaal
- Oosterhornhaven

The outer and inner harbours are linked by sea locks.

3.1.1 Outer harbour sections

3.1.1.1 Entrance

The entrance is near the deep water of the Oostfriesche Gaatje and lies opposite radar station Knock on the German mainland. The distance between the two moles is 400 metres. The bottom width is 208 metres with an initial depth of 10.0 metres (depending on season and dredging state). There is a green fixed light at the western mole (Westerhoofd) and a red fixed light at the eastern mole (Oosterhoofd).

3.1.1.2 Zeehavenkanaal

Vessels proceeding through the harbour entrance arrive directly in the Zeehavenkanaal. Going westwards, the Zeehavenkanaal gradually narrows. Navigable width is 100 metres throughout in a westerly direction, with the exception of a small part near to the Nouryon salt jetty where the width is 80 metres. All vessels navigating Zeehavenkanaal have right of way over vessels coming from the access channel to the sea locks.

Established industries have private mooring facilities in the Zeehavenkanaal area. These jetties and berths are located along the Zeehavenkanaal in such a way that the channel width of 100 metres, except near the Nouryon jetty, is not affected.

Private mooring facilities along the Zeehavenkanaal

1 Aldel

| | |
|-----------------------------|--------------------------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 120 metres |
| Maximum length of vessels: | 200 metres |
| Design depth: | 12.0 metres |
| Facilities: | Crane for discharge of alumina |
| Activity: | Discharge of alumina |
| Discharge capacity: | 300 tonnes per hour |

2 JPB Logistics

| | |
|-----------------------------|------------------------------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 230 metres |
| Maximum length of vessels: | 200 metres |
| Design depth: | 10.0 metres |
| Facilities: | Installations for loading tankers |
| Activity: | Loading MDI, acetic acid, methanol |
| Loading capacity: | Maximum 250/300 tonnes per hour |

3 Nobian Base Chemicals BV

| | |
|-----------------------------|-----------------------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 224 metres |
| Maximum length of vessels: | 200 metres |
| Design depth: | 12.0 metres |
| Facilities: | Bulk loading installation |
| Activity: | Loading salt |
| Loading capacity: | Maximum 900 tonnes per hour |



4 Nederlandse Aardolie Maatschappij BV (NAM)

| | |
|-----------------------------|----------------------------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 102 metres |
| Maximum length of vessels: | 150 metres |
| Design depth: | 9.0 metres |
| Facilities: | Installation for loading tankers |
| Activity: | Loading condensate |
| Loading capacity: | 500 cubic metres per hour |

5 Contitank Tankstorage

| | |
|-----------------------------|---|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 200 metres |
| Maximum length of vessels: | 200 metres |
| Design depth: | 12.0 metres |
| Facilities: | Installations for loading/ discharging |
| Activity: | Loading/discharging vegetable oil, glycerine |
| Discharging capacity: | 350 tonnes per hour |
| Loading capacity: | On request |

6 Niestern Sander

| | |
|-----------------------------|--|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 100 metres |
| Maximum length of vessels: | On request |
| Design depth: | 7.0 metres |
| Activity: | Loading and discharging general cargo and offshore |
| Special features: | <ul style="list-style-type: none"> Paved area of 8,000 square metres Fresh water connection Electricity connection Office facilities |

3.1.1.3 Handelshaven

The Handelshaven basin, near the town of Delfzijl, has 1,220 metre quay facilities. The basin is divided into an eastern and a western part. The eastern part of the Handelshaven has two loading/unloading quays and both are fully utilised by private companies. Stevedores can handle general and bulk cargoes at these quay.

Loading/unloading quay

Handelskade East

| | |
|--------------------|--|
| Berthing location: | Fenders 1 to 33 |
| Length of quay: | 650 metres |
| Design depth: | 11.25 metres (vessels of up to 10.0 metres draught can berth here) |
| Quay level: | + 4.95 metres NAP |
| Facilities: | <ul style="list-style-type: none"> Three electric cranes: 1 x 5 tonnes and 2 x 30 tonnes Rail connection Fresh water connections Private combi weighbridge, for public use, of 100 tonnes capacity and 18 metres length Eight sheds with total area of 42,400 square metres 15,000 square metres of open storage Slops disposal facility Area of quay for handling dangerous cargoes |

Handelskade D/E

| | |
|-----------------|--|
| Length of quay: | 235 metres (length of the berth is 200 metres) |
| Design depth: | 11 metres |
| Quay level: | + 3.40 metres NAP |
| Facilities: | One container handling crane (mobile cranes available for handling bulk cargo) |

In the western part of the Handelshaven is a dedicated quay for tourism and recreation purposes. This is the Handelskade West (sections A, B and C) with a length of 550 metres and allows no cargo handling activities. In front of this quay is a floating jetty of 320 metres with berths on both sides used by Groningen Seaports to berth all kinds of small and medium sized vessels. The marina of the Royal Rowing and Sailing Club 'Neptunus' is located between this floating jetty and the Handelskade West and can be reached by way of an opening near the harbour bridge.

Other facilities on the south side of Handelskade West

From west to east

- Boxen
- Farmsum Jetty
- Dry docks – ship repair and
engineering works (Niestern
Sander, see section 3.1.4)

3.1.1.4 Damsterhaven

The Damsterhaven basin is a small harbour behind the harbour bridge and is an ISPS location. The basin has 140 metre quay facilities.

Heuvelman Ibis

| | |
|-----------------------------|------------------------------|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 140 metres |
| Design depth: | 6.20 metres |
| Activity: | Loading and discharging bulk |

3.1.2 Sea locks

The outer and inner harbour sections in Delfzijl are connected via the locks in the Eemskanaal. The sea locks operate 24 hours a day and are supervised by the Province of Groningen. The lock master will not allow vessels to pass through the lock unless a keel clearance of 0.3 metres is available.

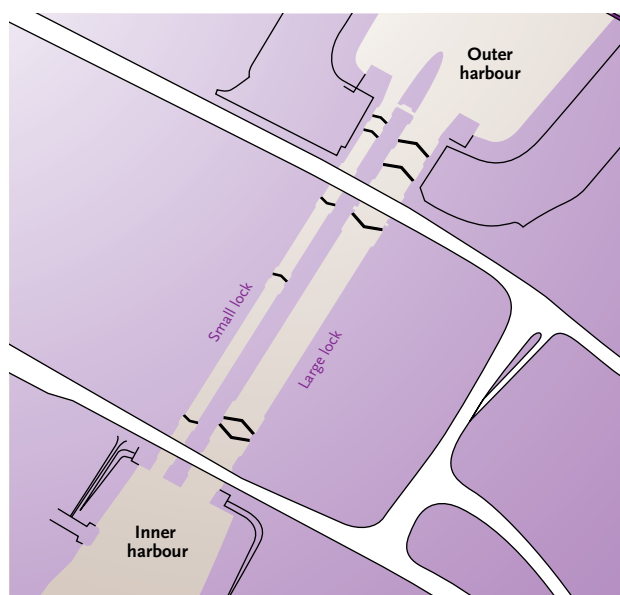
Dimensions of the sea locks

Small (western) lock

- Length at low tide 123 metres
- Length at high tide 81 metres
- Width 7 metres
- Depth inside 2.40 metres

Large (eastern) lock

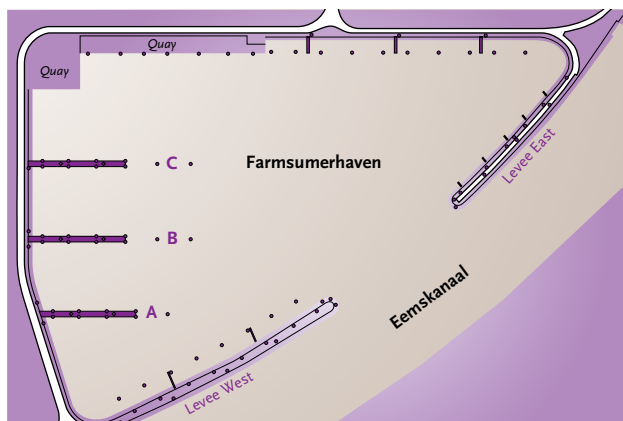
- Length 120 metres
- Width 16 metres
- Depth of sill -5.45 metres NAP



3.1.3 Inner harbour sections

3.1.3.1 Farmsumerhaven

The Farmsumerhaven, supervised by Groningen Seaports, provides a berth for waiting vessels with a maximum draught of 5.0 metres. Total length alongside jetties and dolphins is 1,165 metres. A 150 metre quay is located in the northern part of the basin. Vessels should apply for a berth to the nautical service centre, VHF Channel 66.



3.1.3.2 Eemskanaal

Farmsumerpoort, and dedicated area for small and medium sized enterprises south of Delfzijl/Farmsum, is under the management of Groningen Seaports. This business park has a waterfront connection via the Eemskanaal. Depth in the Eemskanaal is -5.0 metres NAP. A drop in the water level, due to sluicing, occurs in this area. The maximum permitted length of ships in Eemskanaal is 120/144 metres and the following quays and jetties are located alongside the Eemskanaal (old and new part).

Quays and jetties located alongside the Eemskanaal

• J. Wildeman Storage & Logistics

Type of mooring facility: Quay
Length of mooring facility: 135 metres
Design depth: 5.1 metres
Facilities: Reach stacker
Activity: Discharging/loading containers and general cargo
Special features: Storage capacity

• Agrifirm BV

Type of mooring facility: Quay
Length of mooring facility: 77.5 metres
Design depth: 5.1 metres
Facilities: Grain elevator
Activity: Discharging/loading agricultural products

• Wijnne Barends Logistics BV

Type of mooring facility: Quay
Length of mooring facility: 60 metres
Design depth: 5.1 metres
Activity: Discharging/loading forest products and general cargo
Special features: Storage capacity

• Gulf (East)

Type of mooring facility: Jetty
Length of mooring facility: 15 metres
Design depth: 3.6 metres
Activity: Discharging/loading fuels
Special features: Storage capacity

• Gulf (West)

Type of mooring facility: Jetty
Length of mooring facility: 41 metres
Design depth: 3.6 metres
Activity: Discharging/loading fuels
Special features: Storage capacity

• Eemsmond Betoncentrale BV

Type of mooring facility: Quay
Length of mooring facility: 109 metres
Design depth: 4.0 metres
Facilities: Cranes
Activity: Producing concrete, discharging sand, gravel, cement and various bulk goods
Special features: Storage capacity

• Nieveen BV

Type of mooring facility: Quay
Length of mooring facility: 56 metres
Design depth: 4.0 metres
Facilities: Grain elevator
Activity: Loading/discharging grain

• Heuvelman Ibis BV

Type of mooring facility: Quay
Length of mooring facility: 70 metres
Design depth: 2.5 metres
Facilities: Crane
Activity: Loading/discharging various bulk goods, mostly connected with maintenance of roads and fairways
Special features: Equipment for maintenance works

• Zuidersma Fourage

Type of mooring facility: Quay
Length of mooring facility: 75 metres
Design depth: 2.5 metres
Activity: Discharging/loading bulk goods
Special feature: Westfries shed

3.1.3.3 Oosterhornhaven

The Oosterhornhaven, under the management of Groningen Seaports, is an industrial inner harbour with an open connection to the Eemskanaal. Vessels navigating the Oosterhornhaven must pass the Weiwerderbrug drawbridge, which has a clearance of 14 metres.

The maximum dimensions of seagoing vessels to enter the Oosterhornhaven are 90 x 13 metres with a draught of 5.0 metres and an air draught of 8.0 metres. The Oosterhornhaven has a depth of -5.2 metres NAP. After passing the Heemkesbrug the depth is also -5.0 metres NAP. Due to sluicing, a drop in water level occurs in the Oosterhornhaven. The maximum permitted length of seagoing vessels in the Oosterhornhaven is 90 metres.

The maximum berth length for seagoing vessels is 90 metres and for inland vessels 110 metres.

With the exception of the western part – where the navigable width is 90 metres – the Oosterhornhaven has a navigable width of 60 metres. The other part of the Oosterhornhaven is an L-shaped extension which runs in a southerly direction for 600 metres and for about 900 metres up to the Heemkesbrug.

On the northern slope are a bulk salt loading installation, several quays and jetties for the handling of chemical products and raw materials, facilities for waiting vessels and a fully equipped jetty, used by BioMCN, at which volatile liquid chemicals may be handled in or out of inland tankers and seagoing coastal tankers. Beyond the Heemskesbrug, the port extends for a further 1,100 metres.

Quays and jetties located alongside the Oosterhornhaven (see map on page 16)

A Nobian BV

Type of mooring facility: Jetty **P**
 Length of mooring facility: 67.50 metres
 Design depth: 5.1 metres
 Activity: Discharging of lye and loading of calcium chloride

Type of mooring facility: Jetty **M**
 Length of mooring facility: 120 metres
 Design depth: 5.1 metres
 Activity: Loading salt and soda
 Special feature: Lay-by berth

Type of mooring facility: Jetty **N** (waiting)
 Length of mooring facility: 174 metres
 Design depth: 5.1 metres
 Activity: -
 Special feature: Lay-by berth

Type of mooring facility: Jetty **O** (BioMCN)
 Length of mooring facility: 99 metres
 Design depth: 5.1 metres
 Activity: Discharging EDC and loading methanol

B Lay-by berth (1) near jetty Nobian-Q

Type of mooring facility: Jetty
 Length of mooring facility: 60 metres
 Design depth: 5.1 metres
 Activity: Dangerous goods
 Obligations:

- Special permission of port authority
- Mooring port side alongside

C DOW Benelux BV

Type of mooring facility: Quay
 Length of mooring facility: 130 metres
 Design depth: 5.1 metres

D ESD-SIC BV

Type of mooring facility: Quay
 Length of mooring facility: 72 metres
 Design depth: 2.8 metres
 Activity: Discharging silversand, cokes and loading silicon carbides

E Heuvelman Ibis BV

Type of mooring facility: Quay
 Length of mooring facility: 106 metres
 Design depth: 5.23 metres
 Activity: Discharging urea

F Groningen Seaports

Type of mooring facility: Quay
 Length of mooring facility: 43 metres
 Design depth: 5.23 metres
 Activity: Project cargo loaded or discharged

G Etex Building Performance BV (Siniat)

Type of mooring facility: Quay
 Length of mooring facility: 63 metres
 Design depth: 5.0 metres
 Activity: Discharging gypsum

H Lay-by berth (former jetty North Refinery)

Type of mooring facility: Jetty
 Length of mooring facility: 51 metres
 Design depth: 5.1 metres
 Activity: -
 Obligation: Mooring port side alongside

I Lay-by berth (2) in swinging basin at the end of the Oosterhornhaven

Type of mooring facility: Jetty
 Length of mooring facility: 60 metres
 Design depth: 4.5 metres
 Activity: Dangerous goods
 Obligations:

- Special permission of port authority
- Mooring port side alongside

3.1.4 Ship repair facilities

The Royal Niestern Sander Shipyard, in the southern part of the Handelshaven, has shiprepair, newbuilding and engineering facilities.

The repair department has

- A floating dry dock suitable for vessels up to 125 x 18.5 metres and 10,000 dwt. Lifting capacity: 6,000 tonnes.
- A floating dry dock suitable for vessels up to 185 x 25 metres and 20,000 dwt. Heavy trucks easily can reach both docks, which are well equipped with cranes and other facilities. Lifting capacity: 11,000 tonnes.
- Two side launching slipways with maximum allowable draught of 2.1 and 3.4 metres; maximum lightweight of vessels 700 and 1,700 tonnes (vessels with an overall length of 137 metres and a maximum breadth of 14.2 metres can be handled on these slipways).

New build vessels

The facilities for new buildings embrace an inland new building yard inclusive a hall for the building of vessels 140 x 16 metres. The production facilities for new buildings and assembly in the Handelshaven of Delfzijl handle vessels with maximum dimensions of 160 x 23 metres.

Other facilities

- Engineering works (constructions for onshore and offshore industries, operations on non-ferrous materials, etc.).
- Carpentry division.
- Repair boat with welding and other equipment for above-water repairs in Delfzijl.
- Shore cranes:
 - at shipyard, 2 x 8 tonne and 1 x 18 tonne cranes;
 - at dry dock 1, 2 x 12 tonne cranes;
 - at dry dock 2, 2 x 6 tonne cranes.
- One 60 tonne floating sheer leg (with spread of 8 to 10 metres).

3.2 Eemshaven

Eemshaven is a 1,324 hectare commercial and industrial port complex in an area reclaimed from the sea between 1970 and 1974. This relatively new deep sea port complex experiences up to the present a fast development as energy port which focuses on logistic values and opportunities. Groningen Seaports manages the port as well as the industrial area.

The port is divided into five areas

- Doekegatkanaal (entrance)
- Beatrixhaven
- Julianahaven
- Emmahaven
- Wilhelminahaven

3.2.1 Doekegatkanaal (port entrance)

Eemshaven is accessible for vessels with an operational draught up to 14.0 metres under normal HW conditions.

The distance between the two moles is 470 metres. There is a green fixed light at the western mole and a red fixed light at the eastern mole. The Doekegatkanaal has a width at entrance of 325 metres and a length of 2,100 metres. The bottom width is 200 metres with an initial depth of -15.20 metres NAP.

A swinging basin with a diameter of 500 metres and a depth of 9.0 metres is located at the end of the Doekegatkanaal. To the east of the swinging basin is the Wilhelminahaven with a length of 1,200 metres, a bottom width of 200 metres and a depth of 15.0 to 17.0 metres.

To the west of the swinging basin are other basins

- Julianahaven, with a length of 1,200 metres, a bottom width of 200 to 250 metres and a depth of 14.0 to 17.0 metres.
- Emmahaven, with a length of 500 metres, a bottom width of 120 to 150 metres and a depth of 10.0 metres.

3.2.2 Julianahaven

The basin has a length of 1,200 metres, a breadth of 200 to 250 metres and a design depth of 14.0 to 17.0 metres.

Bulk quay

A public bulk quay has been built along the north bank of the Julianahaven with the following particulars

| | |
|-----------------------------|--------------|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 1,100 metres |
| Design depth: | 15 metres |

The following companies are in operation behind this bulk quay:

Wijnne Barends, Cement Sales North GmbH, Holland Malt, Eco Fuels Netherlands, and Buss Terminal Eemshaven

- **Buss Terminal Eemshaven BV**
(Berthing location fender Nos 50 to 118)

Buss Terminal Eemshaven BV is operating a multi-purpose terminal with 254,000 square meters of logistics space and a quay length of 694 metres. Services for the offshore wind-energy sector are one major focus of operations. Fork-lift trucks, reachstackers, mobile portcrane (max. cap. 208 tons), heavy lift platform (20 to/m²) and modern stevedoring equipment are available to handle project cargo, heavy lift, break bulk, containers and ro-ro.

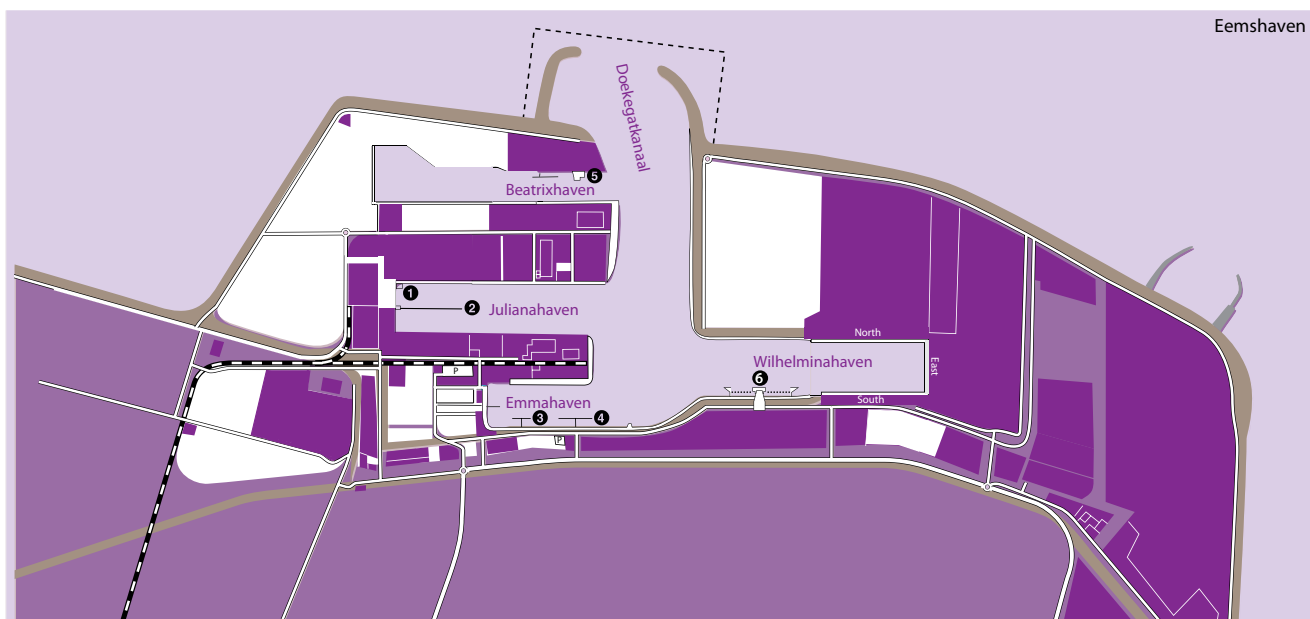
Roro terminal

A public roro terminal, managed by an independent operator, is located along the northwestern bank of the Julianahaven. The roro bridge (1) is designed to allow seagoing ships to be loaded and discharged rapidly and efficiently. The bridge has three lanes so that vehicles can be driven on and off the ship simultaneously. The whole structure is protected by a fender beam.

- **Hydraulic ramp**
Length: 35 metres
Width: 20 metres
Headroom: 10 metres
Loading: 100 tonne reach stacker
Project cargo: Up to 300 tonnes
Maximum gradient: 10°

Oil jetty Julianahaven

A public oil jetty (2) is located at the end of the Julianahaven and is equipped for the transshipment of fluid cargo from/to tank vessels. There are mooring facilities at both sides of the jetty. The length overall is 285 m. (seagoing vessels) and 110 m. (inland vessels).



Southern quay

Along the southern bank of the Julianahaven is a general cargo, roro and container handling quay with a length of 1,150 metres and a width of 200 to 250 metres. The quay level is 4.4 metres above NAP at quayside and 4.8 metres above NAP at the centre of the quay.

The following stevedoring companies are in operation at this private quay

- **Wagenborg Stevedoring BV**
(Berthing location fender Nos 1 to 24)

Wagenborg Stevedoring BV operates six electric cranes of 20 tonnes capacity each and two spiral ship loaders for bagged cargo. There is storage area of 100,000 cubic metres including 35,000 square metres of shed-space, partly with climate control, and a 150 metre rail terminal.

Fork-lift trucks of up to 30 tonnes and modern stevedoring equipment are available to handle forest products, general cargo and containers. There is also equipment for palletising, de-palletising and offshore activities.

- **Eemshaven Sugar Terminal CV**
(Berthing location fender Nos 1 to 24)

The terminal is managed by Wagenborg Stevedoring BV.

The horizontal bulk sugar silo of 296 x 69 x 33 metres has a storage capacity of 100,000 tonnes. Reception is possible by bulk rail wagon, bulk road truck and self-unloading barge. Loading bags into seagoing vessels is possible via six bagging lines and via two spiral ship loaders with a capacity of 120 tonnes per hour per loader, or in bulk via a bulk loader with a capacity of 750 tonnes per hour.

- **Sealane Coldstorage BV**
Quay length of 120 metres (fender Nos 25 to 30).

The company operates a multi temperature public bonded cold store ranging from +14°C down to -30°C with different chambers and a total capacity of 100,000 cubic metres. The cold storage is classed with Lloyd's Register: Lloyd's RSC 10/80 URSI and is located on the quay with direct access to the side of the vessel. There is a temperature controlled airlock of 15,000 cubic metres with shelters for loading trucks and access to a rail loading facility inside the store.

- **Wagenborg Stevedoring BV**
Quay length of 544 metres (fender Nos 31 to 57).

Multi-purpose terminal

A general insulated shed of 24,000 square metres is available. The terminal is equipped with four rail mounted cargo/container cranes up to 45 tonnes plus an indoor rail facility (200 metres long and 18 metres wide).

Roro traffic

Wagenborg Stevedoring BV operates a roro ramp for large roro vessels in the south-west corner of the Julianahaven.

The roro ramp has a capacity of 92 tons and a ramp width of about 8.0 metres. Four tug masters, three mafi trailers and two container chassis are available for proper roro handling.

Container traffic

There is a container handling area of 50,000 square metres, equipped with two container cranes of 25 tonnes each, two container chassis and two reach stackers.

3.2.3 Emmahaven

The basin is 500 metres long with a breadth of 120 to 150 metres and a depth of 10.0 metres. In the basin a service jetty (③) and floating jetty (④) provides berthing places for small and medium sized vessels.

Companies located in the Emmahaven

- **Sealane BV**
A quay for general and/or dedicated cargo.

| | |
|-----------------------------|------------|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 130 metres |
| Design depth: | 9.0 metres |

- **Amasus Shipping**
Amasus Shipping B.V. is a full-service shipping office.

| | |
|-----------------------------|------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 130 metres |
| Design depth: | 9.0 metres |

3.2.4 Wilhelminahaven

The Wilhelminahaven has a length of 1,200 metres and a breadth of 275 - 300 metres at a depth of 15.0 to 17.0 metres. It is a dedicated basin in the logistics for power production (coal, biomass, gypsum, fly ash).

| | |
|-----------------------------|--|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 525 metres (north), 450 metres (south), 275 (east) |
| Design depth: | 17 metres |

Public loading and unloading facility

The southern part of the basin hosts a public loading and unloading facility (⑤), for inland vessels with a design depth of 7 metres. The facility is also possible for seagoing vessels, but only under special conditions. A permission of the port authority is needed.

3.2.5 Beatrixhaven

The basin has a length of 1,200 metres and a breadth of about 100-250 metres at a depth of 10.0 metres.

- **AG EMS Nederland BV**
This company operates a daily ropax liner service (⑤) to the German island Borkum.

The roro ramp has a width of 4.7 metres and a capacity of 100 tonnes. A fenced parking area is available for cars and trailers.

| | |
|-------------------------------|-------------------------|
| Type of mooring facility: | Roro ramp |
| Length of mooring facility: | 120 metres |
| Maximum length of vessels: | 90 metres |
| Design depth: | 6.5 metres |
| Activity: | Cargo/passenger service |
| Two extra mooring facilities: | 70 metres and 50 metres |

A second roro ramp has a width of 10.0 metres and a capacity of 45 tonnes.

| | |
|-----------------------------|------------|
| Type of mooring facility: | Roro ramp |
| Length of mooring facility: | 145 metres |
| Maximum length of vessels: | 50 metres |
| Design depth: | 7.0 metres |

- **EMS Maritime Offshore (EMO)**
EMS Maritime Offshore (EMO) runs an offshore service facility.

| | |
|-----------------------------|------------|
| Type of mooring facility: | Jetty |
| Length of mooring facility: | 300 metres |
| Design depth: | 9.0 metres |

- **Holland Norway Lines (HNL)**

This company operates three times a week a ropax liner service (5) to the Norwegian city Kristiansand. A fenced parking area is available for cars and trailers.

| | |
|-----------------------------|-------------------------|
| Type of mooring facility: | Roro ramp |
| Length of mooring facility: | ...metres |
| Maximum length of vessels: | ...metres |
| Design depth: | 6.5 metres |
| Activity: | Cargo/passenger service |

Quay Beatrixhaven

A public bulk quay has been constructed along the south bank of the Beatrixhaven with the following particulars:

| | |
|-----------------------------|--------------|
| Type of mooring facility: | Quay |
| Length of mooring facility: | 1,175 metres |
| Design depth: | 10.0 metres |

- **Wijnne Barends Logistics BV**

(Berthing location fender Nos 1 to 54)
This stevedoring company operates behind the public quay (bollard 1 – 54). The terminal has a warehouse of 15,000 square metres and an open storage area of 45,000 square metres. Cranes of 110 tonnes capacity, forklifts up to 16 tonnes, a Reach Stacker of 40 tonnes and equipment for handling general cargo and containers are available.

- **Bek & Verburg | DHSS**

Bek & Verburg, a specialist in waste collection and segregation, and DHSS, a vessel agency and port service provider, together construct a new offshore service base behind the public quay (bollard 97 – 107).

Heavy load quay

On the west side of the Beatrixhaven a heavy load quay is situated, especially designed for extra-heavy cargoes. It is suitable for near quay jacking. Jack-up vessels can moor just in front of this quay and use their own cranes.

| | |
|---|-----------------------|
| Length of mooring facility: | 220 metres |
| Design depth: | 11.5 metres |
| Maximum load: | 30 ton/m ² |
| Alongside the quay it is allowed to jack-up rigs /offshore installation vessels | |





Map of Delfzijl



Issued sites
 Available sites
 Cultivation/various



| | | | |
|--|--|--|---|
| 1005 Wijnne Barends Logistics | 1801 Graanbedrijf Nieveen BV | 3208 Vastgoed Koetze | Ibis BV |
| 1007 Koninklijke Wagenborg Groep | 1803 Eemsmond Betoncentrale | 3300-3342 Nobian Base Chemicals BV | 3801 Gebroeders Borg |
| 1011 Havenbedrijf Delfzijl BV | 1808 Heuvelman Ibis BV | 3332 Nobian Salt BV | 3805 De Boer Demontage |
| 1021 Wagenborg Stevedoring | 1811 Straalbedrijf Koop | 3336 Delamine BV | 3807 Wijnne Barends Logistics |
| 1021 Wagenborg Bulk Terminal | 1812 CEBO Holland BV | 3337 Delesto BV | 3832 Chemport Innovation Center |
| 1102 Wijnne Barends Logistics | 1814 Betonbouw Delfzijl | 3340 Bio MCN (OCI) | 3840 Eneco Bio Golden Raand |
| 1134 Heuvelman Ibis BV | 1816 MAIN BV | 3341 Lubrizol Advanced Materials Inc | 3943 Bertschi AG |
| 1262 R.J. de Vries - Friesland BV | 1901 Sita Recycling Services | 3342 Teijin Aramid BV | 3945 DOW Benelux BV |
| 1301 Koninklijke Niestern Sander BV | 1906 Agrifirm Delfzijl | 3353 ChemCom Industries BV | 3949 Schipper Recycling BV |
| 1410 Koninklijke Wagenborg Groep | 1908 Wijnne Barends Logistics | 3356 Evonik | 3950 Groningen Seaports |
| 1415 Koninklijke Niestern Sander BV (Docklocation) | 2002 TD Constructies | 3357 North Water | 3955 S & B BV |
| 1501 Wegrestaurant Schipper | 2004 Holland Unique Units | - Heuvelman GSO | 4231 Heuvelman GSO |
| 1502 ODN | 2009 Hikmat Carcleaning | - Avantium | 4302 KBM Master Alloys BV |
| 1503 GFI | 2110 Merema Delfzijl BV | 3402 Aldel | 4303 Nederlandse Aardolie Maatschappij BV |
| 1504 Bouwman Hydrauliek | 2111 B & S International BV | 3403 RSP Technology | - Purified Metal Company |
| 1506 Datema Delfzijl | 2120 Pultrum Project | 3405 Spie Nederland BV | 4313 ESD-SIC BV |
| 1507 Smit Betonboringen | 2302 - | 3406 Etex Building Performance | 4618 Nederlandse Aardolie Maatschappij BV |
| 1510 Nederlandse Aardolie Maatschappij BV | 2405 Vos Logistics BV | 3407 Vertisol Overslag en Verhuur | 4620 JPB Groep BV |
| 1601 ContiTank | 2632 Fa. Godlieb & Zn | 3409 Zeolyst CV | 4901 Subcoal International |
| 1706 Koninklijke Niestern Sander BV (Headquarters) | 2659-2660 B & S International BV | 3410 EEW Energy from Waste Delfzijl BV | |
| 1711 Koninklijke Niestern Sander BV (Newbuilding) | 2701 Nautisch Centrum Delfzijl | 3424 RMD (Roba Metals Delfzijl) | |
| 1715 Koninklijke Niestern Sander BV (Maintenance) | 2704 Orange Performance Sailcraft | 3601 PPG Industries Chemicals BV | |
| | 2706 Ubels Offshore | 3606 Gebroeders Borg op-en overslag BV | |
| | 2707 Maatschap R. de Wit (Het Botenhuis) | 3607 Reym | |
| | 2709 Marine Maintenance Service | 3650 Zanddepot Heuvelman | |
| | 3201 Veenstra Onderhoud | | |
| | 3202 Kok Voegwerken | | |
| | 3205 EQUIN | | |



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Map of Eemshaven



Issued sites
 Available sites
 Extension harbourbasin
 N

| | | |
|--|---------------------------------------|----------------------------------|
| 7009 NorNed | 8125 Amasus Shipping | 8486 TenneT GmbH |
| 7011 - | - RelyOn Nutec | 8492 Cement Sales North GmbH |
| 7013 Rijkswaterstaat | 8178 Werkman Hoofcare | 8494 Wijnne Barends Logistics |
| 7016 - | 8179 KNRM (Rescue Squad) | 8503 Koninklijke Wagenborg Groep |
| 7017 TenneT | 8186 Service Centrum Eemshaven | 8511 Sealane Coldstorage BV |
| 7018 RWE | - Eemshaven Distributie Centrum | 8515 Eemshaven Sugar Terminal |
| 7025 EQUIN | 8189 Sealane Coldstorage BV | 8930 Heliport Eemshaven |
| 7030 Schakelstation Enxix | 8190 Seafarers' centre | 8940 Holland Norway Line (HNL) |
| 7035 Schakelstation Robbenplaat | 8206 Restaurant Diekgat | 8948 EMS Maritime Offshore |
| 7047 ENGIE Nederland BV | 8221 RWE Innogy Windpower Netherlands | 8950 AG EMS Nederland BV |
| 7210 Google | 8301 O.K. Invest | 9001 Vopak Terminal Eemshaven |
| 7402 RWE (Building Area) | 8302 O.K. Invest | - NAM |
| 7635 BOW Terminal | - Collé | - Waterschap Noorderzijlvest |
| 7650 Vattenfall (former Nuon) | 8308 Tata Communications | |
| - Van Merksteijn International | 8223 Peterson Offshore | |
| 7720 Gemini | 8310 Jan Snel Group | |
| 7750 TenneT | 8415 Bek & Verburg DHSS | |
| 7760 COBRAcable | 8454 Buss Terminal Eemshaven | |
| 7805 QTS | 8475 Wijnne Barends Logistics | |
| 7810 Bakker Bierum Cold Stores | 8480 Buss Terminal Eemshaven | |
| 7820 Theo Pouw Secundaire Bouwstoffen BV | 8480 Broekman Logistics | |
| 8016 Nijlicht (Office) | 8482 Eco Fuels Netherlands | |
| 8050 Kamstra Travel BV | 8484 Holland Malt BV | |
| 8111 Gulf | | |



Companies

Phonenumbers

Port authorities

| | | |
|-----------------------|-----------------------------|---------------------|
| Groningen Seaports | Head office Delfzijl | +31 (0)596 64 04 00 |
| | Nautical Service Center | +31 (0)596 64 04 77 |
| Customs | Head office Zwolle | +31 (0)38 467 25 41 |
| | Office Eemshaven | +31 (0)596 51 64 49 |
| | Office Veendam | +31 (0)598 69 67 00 |
| Immigration | Office Delfzijl | +31 (0)596 61 38 31 |
| | Office Delfzijl (sea locks) | +31 (0)596 63 38 70 |
| | Office Eemshaven | +31 (0)596 51 61 01 |
| Province of Groningen | Sea locks | +31 (0)596 63 38 60 |
| | Weiwerderbridge Delfzijl | +31 (0)596 63 38 60 |

Agencies, stevedoring & warehousing

| | | |
|----------------------------------|--------------------------------|---------------------|
| AG EMS Nederland BV | Passenger service | +31 (0)596 51 60 84 |
| Amasus Shipping BV | Shipping agency | +31 (0)596 64 98 00 |
| Gebr. Borg BV | Stevedoring | +31 (0)655 75 02 89 |
| BOW Terminal | Stevedoring, offshore, storage | +31 (0)118 48 63 34 |
| Broekman Logistics | Shipping agency | +31 (0)10 487 39 11 |
| Buss Terminal Eemshaven | Stevedoring, offshore, storage | +31 (0)596 51 63 30 |
| Deep BV | Shipping agency | +31 (0)20 634 36 76 |
| DHSS | Shipping agency | +31 (0)596 74 51 00 |
| Elzinga Cargo Facilities BV | Stevedoring, cranes | +31 (0)595 41 30 80 |
| Havenbedrijf Delfzijl | Stevedoring, cranes | +31 (0)596 63 50 60 |
| Rhenus Logistics | Shipping agency | +31 (0)10 440 04 25 |
| Sealane BV | Shipping agency, warehousing | +31 (0)596 63 38 88 |
| Tarbit Tankers | Shipping agency | +31 (0)78 639 10 30 |
| Van der Veen Shipping | Shipping agency | +31 (0)596 61 63 00 |
| Wijnne Barends Agency BV | Shipping agency, warehousing | +31 (0)596 63 77 77 |
| Wagenborg Shipping & Stevedoring | Shipping agency, warehousing | +31 (0)596 63 69 11 |

Boatmen, pilots, port reception facilities & tugboats

| | | |
|---------------------------------------|-------------------------|---------------------|
| Bek & Verburg | Port reception facility | +31 (0)596 74 50 27 |
| Boatmen Delfzijl/Eemshaven | Boatmen | +31 (0)596 64 04 77 |
| Int. Sleepdienst v/h F. Bijma | Tugboats | +31 (0)598 45 17 78 |
| Jongen BV | Port reception facility | +31 (0)78 635 29 34 |
| MAIN BV | Port reception facility | +31 (0)223 63 21 77 |
| Nederlands Loodswezen BV, regio Noord | Pilots | +31 (0)596 61 81 88 |
| Reym | Port reception facility | +31 (0)598 65 95 00 |
| Sita Recycling Services | Port reception facility | +31 (0)598 69 66 33 |
| Van Gansewinkel | Port reception facility | +31 (0)50 316 88 88 |
| Wagenborg Sleepdienst BV | Tugboats | +31 (0)596 63 69 11 |

Colophon

- **Issued by**
Groningen Seaports
- **Photography**
Fotografie Koos Boertjens
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Delfzijl
April 2022





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