

Agenda Item 5 Sewage discharges from ships and port reception facilities

Document code: 5/1
Date: 21.10.2013
Submitted by: Secretariat

DRAFT 2013 HELCOM OVERVIEW ON PORT RECEPTION FACILITIES FOR SEWAGE IN THE BALTIC SEA AREA AND RELATED TRENDS IN PASSENGER TRAFFIC

This document aims to complement the 2013 HELCOM Interim Guidance on sewage delivery to Port Reception Facilities endorsed by the 2013 HELCOM Ministerial Meeting. It provides an up-to-date compilation of relevant information on port reception facilities (PRFs) for sewage from all main passenger ports in the Baltic Sea region.

It is based on information received and compiled by the HELCOM Secretariat during summer 2013 based on replies to a questionnaire sent to port authorities and national administrations in the region in cooperation with the Baltic Ports Organisation (BPO).

HELCOM HOD 43/2013 took note of the overview on PRFs for sewage and requested MARITIME 13/2013 to finalise the document for publication.

Background

In 2011 IMO designated the Baltic Sea as a "special area" for passenger ships in terms of MARPOL Annex IV (on sewage from ships). This IMO decision was based on a proposal by Baltic Sea coastal countries submitted in 2010, developed as a follow up of a commitment included in the 2007 HELCOM Baltic Sea Action Plan (BSAP), as a measure to meet the country, and basin, specific nutrient pollution reduction goals.

The BSAP nutrient pollution goals are to be reached with measures taken within all relevant fields of human activity including agriculture, emissions to air from land and sea traffic as well as sewage, both from municipalities and industry facilities on land as well as from passenger ships.

The coastal countries shall report to IMO (MEPC) once the sewage reception facilities in the Baltic Sea ports fulfill the criteria of adequacy, before the "special area" regulations will take effect on 1 January 2016, at the earliest.

Up-to-date port specific information on PRFs for sewage or passenger traffic in the region is needed to provide an overview of the situation in the region by 2013.

The Meeting is invited to consider, amend and approve for publishing on the HELCOM website the draft overview of PRFs for sewage and passenger traffic in the Baltic Sea region.

Draft 2013 HELCOM overview on port reception facilities for sewage in the Baltic Sea area and related trends in passenger traffic

About this document

Up-to-date and port specific information on sewage facilities or passenger traffic in the region is likely needed to enable an assessment of the progress toward to the aims included in the 2010 HELCOM roadmap for upgrading PRFs, namely to improve the facilities of the “first priority ports” and consider measures in the “second priority ports”, but also to respond to other passenger traffic relevant developments in the region.

This document aims to complement the 2013 HELCOM Interim Guidance on sewage delivery to Port Reception Facilities by providing an up-to date compilation of sewage PRF – relevant information from all main passenger ports in the Baltic Sea region. It is based on information received and compiled by the HELCOM Secretariat during summer 2013 based on replies to a questionnaire sent to port authorities and national administrations in the region in cooperation with the Baltic Ports Organisation (BPO). An exchange of letters under the Nordic Council, initiated by MPs Christina Gestrin (Finland) and Anders Eriksson (Åland), the Baltic Port List series published by the Turku University Centre for Maritime Studies as well as the 2013 statistics compilation by Cruise Baltic have been used as additional information sources.

Besides providing an update regarding the current status of sewage port reception facilities and applicable fees it includes also recent statistics on passenger traffic in the ports. The information is provided as tables labeled as “first priority ports”, “second priority ports” and “adequate ports” which refer to categories included in the 2010 HELCOM PRF Roadmap. In addition a category “other ports” have been included to cover ports which were not listed in the 2010 HELCOM roadmap but have cruise ship traffic according to information from Cruise Baltic. Finally, some Baltic wide summary figures and maps are provided on the last pages. The ports included in this summary include all the main ports and are estimated to cover 100% of cruise ship traffic (Cruise Baltic) and more than 96% of total passenger traffic (Baltic Port List 2012) in the Baltic Sea region.

General background

In 2011 IMO designated the Baltic Sea as a “special area” for passenger ships in terms of MARPOL Annex IV (on sewage from ships). The coastal countries shall report to IMO (MEPC) once the sewage reception facilities in the Baltic Sea ports fulfill the criteria of adequacy, before the “special area” regulations will take effect on 1.1.2016, at the earliest.

The IMO decision to designate the Baltic Sea as an Annex IV “special area” in 2011 was based on a proposal by Baltic Sea coastal countries submitted in 2010, developed as a follow up of a commitment included in the 2007 HELCOM Baltic Sea Action Plan (BSAP), as a measure to meet the country, and basin, specific nutrient pollution reduction goals. The BSAP nutrient pollution goals are to be reached with measures taken within all relevant fields of human activity including agriculture, emissions to air from land and sea traffic as well as

sewage, both from municipalities and industry facilities on land as well as from passenger ships.

In anticipation of the 2011 IMO decision the 2010 HELCOM ministerial meeting set up a Baltic Sea Cooperation platform on sewage PRFs. The latter has during 2010-2013 involved the shipping industry, technology providers, ports and national authorities for discussions on outstanding issues around the improvement of sewage PRFs in the region. The outcomes have been reported to the HELCOM MARITIME Group where the competent national administrations of the Baltic Sea countries have provided their input.

By 2013 the work of this cooperation platform resulted in the document "HELCOM Interim Guidance on technical and operational aspects of sewage delivery to port reception facilities" which has been submitted to the HELCOM 2013 Ministerial Meeting for adoption. The Guidance outlines current best practices as well as outstanding issues in terms of PRF improvements.

Besides establishing the cooperation platform the 2010 ministerial meeting adopted also a document called "Road-map for upgrading port reception facilities for sewage in passenger ports of the Baltic Sea area". The 2010 Roadmap lists eight ports (Tallinn, Rostock, Copenhagen, Riga, Gdynia, Helsingör, Rödbby and Swinouscje) as first priority ports where the Baltic Sea countries should take all appropriate measures to upgrade port reception facilities to a standard sufficient for large passenger ships. In addition the document lists a number of second priority ports where the need of further upgrade measures should be investigated. Finally it states that Helsinki, St. Petersburg, Stockholm, Visby and Klaipeda have adequate port reception capacity for sewage.

Due to the timing of IMO meetings a notification of adequacy is likely to be submitted to IMO by the end of 2014. Baltic Sea countries established recently a correspondence group discussing the adequacy at a meeting of the HELCOM Maritime Group (June 2013, Helsinki). The work of the PRF cooperation platform is also anticipated to continue with the next meeting scheduled for 25 November 2013 in Szczecin, Poland, as well as the (back to back) HELCOM MARITIME Group meeting 26-28 November 2013 in Szczecin, Poland.

1. First priority passenger ports (2010 HELCOM PRF Road Map)

Port	No. of international passengers (ferries and cruise ships) ¹	No. of cruise passengers (cruise ships only) ²	No. of cruise ship calls ³	Arrangement of port reception facilities for sewage (2013)	Application of the "no-special-fee" system for sewage (2013)	Additional information
Tallinn (EE) http://www.portoftallinn.com/paljassaare-harbour Cruise Baltic port category: X-large	2006:6760000* 2007: 6514294 2008: 7247366 2009: 7257646 2010: 7900000 2011: 8500000 2012: 8800000	2006: 305026' 2007: 294738 (292158') 2008: 377522 (375578') 2009: 416605 (415575') 2010: 392000 (390000') 2011: 443000 (437517') 2012: 442000 (440504')	2006:289' 2007:268' 2008:298' 2009:305' 2010:279' 2011:293' 2012:294'	Since 2011 fixed reception points connected to public sewage system (30m ³ /h) available at Tallinn Old City Harbour quays no. 1 and 3. In other quays there is no direct discharge to sewer system – i.e. the quays are served by floating vehicles (150-300m ³) and tank trucks (7-17m ³) if requested.	[Yes] A standard waste fee is charged from every ship with some exceptions. Sewage volumes exceeding 7m ³ are subject to extra payment.	In 2014 the Port of Tallinn is expecting to start construction of fixed reception points connected to the Tallinn public sewage system. These improvements will cover Old City Harbour quays no 13-17, 24-25 and a new cruise quay.
Rostock (DE) http://www.rostock-port.de/ Cruise Baltic port category: Large	2006:2541144* 2007: 2583042* 2008: 2689551* 2009:2405100* 2010: 2055000 2011: 2005000 2012: 1991000	2006:173500' 2007:133700' 2008: 172000 (171500') 2009: 160000 (161800') 2010: 177000	2006:138' 2007: 92' 2008:116' 2009:114' 2010:114' 2011:158' 2012:181'	Direct discharge to sewer system available in the cruise terminal. Tank trucks available in the	Yes Up to 300m ³ of sewage is included in the "no-special-fee" system. Sewage volumes	The cruise port of Rostock-Warnemünde is equipped with a connection of [all] the berths to the municipal sewer system.

¹ Figures marked with star (*) are from Baltic Port List. Other figures 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

² Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

³ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

		(214800') 2011: 257000 (257300') 2012: 300000 (385800')		cargo port.	exceeding 300m ³ are charged with 3EUR/m ³ .	In 2013 the municipal treatment plant accepts sewage with a maximum intake rate of 90m ³ /h (25 L/s). Sewage from cruise ships (incl. grey water) is accepted only within the defined and published sewage quality parameters.
Copenhagen (DK) http://www.cmport.com/ Cruise Baltic port category: X-large	2006:829000* 2007: 2583043* 2008: 2689551* 2009:1456000* 2010: 1502000 (1431000*) 2011: 1604000 2012: 1722000	2006:458000' 2007:509000' 2008: 560000 2009: 620000 (675000') 2010: 662000 2011: 820000 2012: 840000	2006:280' 2007:289' 2008:301' 2009:334' 2010:307' 2011:368' 2012:372'	Direct discharge to sewer system , 250-300 m3 sewage per hour per berthing place, will be available on new quay which will be operational from 2014 onwards. Otherwise Copenhagen Port's reception facilities for sewage (and grey water) utilise the tankers of a haulage company (possibility to utilise three tankers per delivery). After collection, the sewage is pumped via a pump station and sewer system to the municipal	Yes Collection of that part of the sewage attributable to the ship's operations is made under 'no special fee' in the case of reasonable amounts, taking into account the ship's size and its normal service. A charge will be made for the collection of disproportionately large amounts (i.e. more than 130 litres per person for each 24-hour period since the last port of call), or for collection outside normal working hours, as specified in the list of charges.	In the Port of Copenhagen PRFs for sewage are part of the new 1,1 km long cruise quay which will be finalized in autumn 2013 and which will be taken into use spring 2014. The new system will be equipped with the possibility of flushing with rain water to avoid clogging. Some cruise ship traffic will berth elsewhere and will be without fixed link PRF. Collection of sewage and grey water pursuant to the 'no special fee' system is made on condition that: – the ship can deliver the sewage at the shipside at a pump capacity of 50 m ³ per

				<p>sewage treatment plant.</p> <p>Ferries (not cruise ships): in Copenhagen it is – and has always been - the ferry company, which is responsible towards the public authorities to establish adequate port reception facilities.</p>	<p>A charge will apply for the collection of grey water, in accordance with the list of charges.</p>	<p>hour.</p> <ul style="list-style-type: none"> – tankers can obtain unhindered access to and from the place of collection without delay. – the ship is fitted with a standard flange.
<p>Riga (LV) http://www.rop.lv/en</p> <p>Cruise Baltic port category: Large</p>	<p>2006: 246900* 2007: 441914 2008: 503174 2009: 691508 2010: 319272 2011: 352473 2012: 361674</p>	<p>2006:40843' 2007:65438' 2008: 100253 (50077') 2009: 138703 (69413') 2010: 58564 (58248') 2011: 63527 (63527') 2012: 83091 (83000')</p>	<p>2006: 58' 2007: 88' 2008: 76' 2009: 88' 2010: 63' 2011:69' 2012:92'</p>	<p>Tank trucks are used. Two tank trucks max. quantity: 30m³ each.</p> <p>No direct discharge to sewer system available.</p>	<p>No</p> <p>Sewage from passenger ships is charged at fixed rates per m³.</p>	
<p>Gdynia (PL) http://www.port.gdynia.pl/</p> <p>Cruise Baltic port category: Large</p>	<p>2006: 460231 2007: 432158 2008: 375000 2009: 350585 2010: 538835 2011: 565829 2012: 607607</p>	<p>2006:94135' 2007:89088' 2008: 124000 (123521') 2009: 134895 (134884') 2010: 125005 2011: 78418 2012: 108628</p>	<p>2006:89' 2007:87' 2008:89' 2009:96' 2010:85' 2011:56' 2012:69'</p>	<p>Two inlets adjusted for receiving sewage from ferry „Stena Vision” (Stena Line) in autumn 2010.</p> <p>Otherwise no direct discharge to sewer system and tank trucks</p>	<p>1/3 of all delivered amount of sewage from ferries and cruise ships are received without additional fee.</p> <p>In connection with tonnage fee, the following limits of ship-generated</p>	<p>The upgrade of reception of sewage from passenger ships would require reconstruction of the whole sewer system in the port, which could be done by 1 January 2016.</p> <p>A preparatory study “Conception of sewage collecting in the Port of</p>

				are used. 3 tank trucks (4.5 m3, 5.2m3, 10m3), 1 vat (30m3), max. quantity – 40 m3.	waste to be collected without additional fees have been set for sewage delivery:	Gdynia” completed in 2012.
<p>Helsingør (DK) http://www.helsingor-havne.helsingor.dk/ Cruise Baltic port category: Small</p>	2006:10721000* 2007: 10966000* 2008: 10912000* 2009:9415000* 2010: 4189877 departures only (8534000*) 2011: 4051691 departures only (8324000*) 2012: 3799205 departures only	2006:3322 2007:1800 2008:0' 2009:450' 2010: 2 900 (2600') 2011: 2 900 (5500') 2012: 2 900 (2560')	2006:7' 2007:3' 2008:0' 2009:2' 2010:1' 2011:5' 2012:2'	Direct discharges to city municipal sewer system are available for ferries on the Helsingborg side (SE). [any facilities for cruise ships?]	Yes	This Port has regular RoRo passenger service between Helsingør (Denmark) and Helsingborg (Sweden) with four departures per hour during day time two per hour during night time. Please note that the departing international passenger traffic figures reported by ports (not with star) do not include passengers from the small passenger ship service “Sundbus Pernille” on the Helsingør-Helsingborg route.
<p>Rodby Faergehavn (DK) http://www.rodbyport.dk/ (Ferry only)</p>	2006:6789000* 2007: 7058000* 2008: 6756000* 2009:6305000* 2010: 3065291 departures only (6261000*) 2011: 2966060 departures only (6028000*) 2012: 2956283 departures only	2006:[0?] 2007: [0?] 2008: [0?] 2009: [0?] 2010: 0 2011: 0 2012: 0	2006: [0?] 2007: [0?] 2008: [0?] 2009: [0?] 2010:0 2011:0 2012:0	Ferries have arranged for discharge to private/company owned sewage cleaning plant in Puttgarden, Germany. The sewage Cleaning Plant under German authority survey regime. From	Yes	Regular RoRo passenger service to Puttgarden (Germany) with two ferry departures per hour 24/7. In the tables there are no port called Puttgarden but the outbound passenger figures from Puttgarden port are similar to those outbound from Rodby Faergehavn so all in all the figures from Rodby and

				sewage cleaning plant discharge to Femarn Belt after cleaning.		Puttgarden together will be approximately 6000000 per year.
Świnoujście (PL) https://www.port.szczecin.pl http://www.sft.pl Cruise Baltic port category: Small	2006:929899* 2007: 930 864 2008: 868 623 2009:811300* 2010: 865963 2011: 863799 (866000*) 2012: 880641 (863800*)	2006:19099' 2007:3437' 2008:23331' 2009:25945' 2010: 9384' 2011: 1707' 2012: 1449 (3814')	2006:20' 2007:7' 2008:13' 2009:19' 2010:10' 2011:3' 2012:7'	The port has a direct connection to a treatment plant in the port area. However, the installation has limited technical capacity and cannot accept sewage from cruise ships. Uptake of sewage is currently carried by the tank cars which transport sewage to municipal WWTP.	1/3 of all delivered amount of sewage from ferries and cruise ships are received without additional fee.	Szczecin and Świnoujście Seaports Authority considers researching the demand for improving fixed facilities and taking necessary actions according to obtained results.

2. Second priority passenger ports (2010 HELCOM PRF Road map)

Port	No. of international passengers (sum ferries and cruise ships) ⁴	No. of cruise passengers (cruise ships only) ⁵	No. of cruise ship calls ⁶	Arrangement of port reception facilities for sewage (2013)	Application of the "no-special-fee" system for sewage delivery (2013)	Additional information
Helsingborg (SE) http://www.port.helsingborg.se/ Cruise Baltic port category: Small	2006: 10763267* 2007: 10973554* 2008: 10914193* 2009: 9442700* 2010: 8539627	2006:8311' 2007:7350' 2008:3900' 2009:35598 (25987')	2006:6' 2007:3' 2008:4' 2009:13' 2010:6'	Ferry companies arrange for their PRF for sewage at their own pier,	Yes	Mostly ferry traffic. A few cruise ships per year, most of them lies at anchor in the roads.

⁴ Figures marked with star (*) are from Baltic Port List. Other figures 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

⁵ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

⁶ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

	2011: 8338939 2012: 7840562	2010: 15 635 (15648') 2011: 5194 (7600') 2012: 11338 (11300')	2011:9' 2012:5' [2013:7]	which is a direct connection to municipal WWTP. Tank trucks for cruise ships.		
Fredrikshavn (DK) http://www.frederikshavn.dk/en/ Cruise Baltic port category: N/A (Ferry only)	2006:2594000* 2007: 2624000* 2008: 1979000* 2009:1833000* 2010: 1757889* 2011: 1766399* 2012: 1715487*	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010:0 2011:0 2012:0	Ferries have direct connections to municipal WWTP. No cruise ship visits.	Yes	Only ferry traffic. No cruise ship visits [2006-2012]
Gedser (DK) (no website) Cruise Baltic port category: N/A (Ferry only)	2006:1507000* 2007: 1612000* 2008: 1643000* 2009:1517000* 2010: 720587 departures only 2011:694510 departures only 2012:714499 departures only	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010:0 2011:0 2012:0	Ferries have direct connections to municipal WWTP through the Guldborgsund municipal sewer system. No cruise ship visits.	Yes	Only ferry traffic. No cruise ship visits [2006-2012]
Turku (FI) http://www.portofurku.fi/portal/fi/ Cruise Baltic port category: Small	2006:3163000* 2007: 3022447* 2008: 3008546* 2009:3045000* 2010: 3566000 2011: 3402000 2012: 3376000	2006:3273' 2007:2372' 2008:2996' 2009:2736' 2010: 2000 2011: 5500 (5456') 2012: 2500 (2600')	2006:6' 2007: 7 (9') 2008: 7 (9') 2009: 7 (8') 2010: 6 (6') 2011: 7 (7') 2012: 4 (4')	Ferries in regular traffic have direct discharge system built 1984/1988 and renovated 2005/2008 to city sewers and municipal WWTP. Capacity is up to 250m ³ /h.	Yes The figure indicating the ship's net tonnage is used as a basis for ships' sewage charges. Minimum and maximum charge limits per visit.	Mostly ferry traffic. These discharge around 55k-120k m ³ /year. A few cruise ships arrive irregularly every year. There is not a special cruise quay reserved for cruise ships and due to this they are placed at the cargo harbour area. Due to the cargo area the port has decided that the most cost efficient

				<p>Cruise ships and cargo traffic are served with tank trucks with discharge point in the port area. Capacity of this service is 24m³/h.</p>	<p>Only blackwater is classified as sewage under the NSF.</p> <p>Passenger ferry companies have made direct contract with municipal waterworks.</p> <p>Liner traffic is exempted from "no-special-fee" by the Finnish Transport Safety Agency.</p>	<p>way to service this cruise traffic is with tank trucks. Reception point for sewage from tank trucks is located at the harbor area, which minimizes transportation needs and makes pumping of sewage more effective.</p> <p>Examples of Cruise ships arriving to Turku have discharged 200m³ (Quest for Adventure, in Helsinki 2010), 148 m³ (Saga Ruby, 2009, with tank trucks) and 126 m³ (Black Watch, in Stockholm 2010)</p> <p>Port reception facilities (sewage network) for passenger ferries are owned by the Turku Municipal Waterworks Corporation. Passenger ferry companies have made direct contracts with them. There are certain conditions in contracts about quantities, BOD, suspended solids grease and pH. There is also limit for sulphite. The contracts includes also control responsibility about the sewage quality for ferry companies. Relating to that the owner of sewage network is not the port, the Port has no experience eventual H₂S issues.</p> <p>The dimension of pipes used for these passenger ferries are 250 mm in diameter.</p>
<p>Mariehamn (FI) http://www.mariehamn.ax/naringsliv/hamn/in-english/ Cruise Baltic port category: Small</p>	<p>2006:2681114* 2007: 2 707 864* 2008: 2 859 067* 2009:2 952 000* 2010: 2849200*</p>	<p>2006:3366' 2007:4934' 2008:2174' 2009:2426' 2010: 5312'</p>	<p>2006:12' 2007:19' 2008:9' 2009:10' 2010:19'</p>	<p>Sewage PRF facilities available with pump capacity 30m³/h.</p>	<p>Yes</p>	<p>Cruise ships have so far not used Mariehamn sewage PRF facilities according to port information reported to Nordic Council (Nordiska Rådet) in 2013.</p>

	2011: 2767100 2012:[?]	2011: 3500' 2012:6742'	2011:18' 2012:20'			
Kiel (DE) http://www.portofkiel.com/ Cruise Baltic port category: Large	2006:1465603* 2007: 1543703* 2008: 1754326* 2009:1764800* 2010: 1551510 2011: 1497726 2012: 1568664	2006:154250' 2007:172937' 2008:222130' 2009: 291388' 2010: 341537 (341391') 2011: 377205 (377205') 2012: 348180 (348180')	2006:93' 2007:116' 2008:125' 2009:117' 2010:136' 2011:120' 2012:137'	Port of Kiel has reception facilities on every cruise berth. Direct connection to the municipal WWTP with capacity of 35-50 m ³ /h, depending on berth.	Yes, as follows: The figure indicating the ship's tonnage is used as a basis for ships' sewage charges. So the quantity of sewage, which is included in the 'no-special-fee-system' is limited. Additional volumes are subject to extra payment.	At the seaport Kiel, sewage can be transferred directly into the municipal sewage treatment plant. The seaport has separate suction devices and takes only a transit function. Practical experience shows that in the Port of Kiel, the disposal of the sewage capacity is currently unproblematic, but the flow-rate is limited to 35 – 50 m ³ /h depending on berth. In case of an increasing volume, a detailed analysis would have to be carried out on any arising restrictions, measures or consequences. Based on a berth time of 7 hours of a cruise ship, the reception capacity in port of Kiel is depending on which berth between 245 – 350 m ³ per call/berth.
Ystad (SE) http://www.port.ystad.se/ Cruise Baltic port category: N/A (Ferry only)	2006: 1936622* 2007: 1878383* 2008: 1856856* 2009: 1822700* 2010: 1769629 2011: 1912975 2012: 1961671	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	By tank truck	Yes	Only ferry traffic. No cruise ship visits [2006-2012] The port is discussing with municipal WWTP how to arrange PRFs, planned to be ready by 2017. The port receives only ferry traffic which presently discharge at sea in line with existing law.
Gothenburg (SE) http://goteborgshamn.se/ Cruise Baltic port category: Large	2006: 2199150* 2007: 2102663* 2008: 1856088* 2009: 1747400* 2010: 1686944 2011: 1637063 2012: 1591249	2006:11272' 2007:11404' 2008:12445' 2009:35598' 2010: 50241 (51730') 2011: 69834	2006:18' 2007:23' 2008:18' 2009:34' 2010:41' 2011:52' 2012:69'	Direct connection, trucks and barges	Yes Around 65 cruise ships per year	Direct connection to the municipal WWTP with capacity of 40 m ³ /h. Barges and tank trucks are also available. Ferry traffic has their own piers from where they have arranged their sewage discharge.

		(62154') 2012: 75450 (83000')				
Trelleborg (SE) http://www.trelleborgshamn.se/ Cruise Baltic port category: N/A (Ferry only)	2006: 1696646* 2007: 1816301* 2008: 1820810* 2009:1556100* 2010: 1569486 2011: 1563586 2012: 1537857	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	2006:[0] 2007:[0] 2008:[0] 2009:[0] 2010: 0 2011: 0 2012: 0	Direct connections	Yes Reception of black and grey water is charged in accordance with overall agreement with each ferry liner.	Only ferry traffic. No cruise ship visits [2006-2012] Direct connection black and grey water to the municipal WWTP with a capacity of 120 m ³ /h at each connection. Direct connection at 6 piers. Mostly ferry traffic. Normally 2 ferries discharging at the same time and normal amount to discharge is 10-15 m ³ each time.

3. Passenger ports with adequate PRFs (2010 HELCOM PRF Road Map)

Port	No. of international passengers ⁷	No. of cruise passengers ⁸	No. of cruise ship calls ⁹	Arrangement of port reception facilities for sewage (2013)	Application of the "no-special-fee" system for sewage delivery (2013)	Additional information
Helsinki (FI) http://www.portofhelsinki.fi/ Cruise Baltic port category: X-large	2006: 9046000* 2007: 2008: 9 579 000 2009: 9 683 700* 2010: 10404900* 2011: 2012: [?]	2006:270000' 2007:260000' 2008:360000' 2009:360000' 2010:342000' 2011:385000' 2012:368000'	2006:259' 2007:238' 2008:269' 2009:263' 2010:247' 2011:258' 2012:265'	[Please add]	[Please add]	Vuosaari cargo have installed a pre-treatment facility, waste waters are pumped through this facility before going on to the general sewage system (municipal sewage). The waste water is treated through

⁷ Figures marked with star (*) are from Baltic Port List. Other figures 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

⁸ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

⁹ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

						<p>aeration and/or chemical treatment (lye) (both are in use).</p> <p>In Helsinki City (south harbour) passenger ferries use pre-treatment on board (aeration and ozonation), sewer piping has been renovated: pressure sewers installed.</p> <p>Ventilation of the sewage pumping station in South harbour has been equipped with new filters (so called "citycarb filters", with out-going air set high (lead by an air pipe to a light mast).</p>
<p>Klaipeda (LT) http://www.portofklaipeda.lt/ Cruise Baltic port category : Medium</p>	<p>2006: 240198* 2007: 36 865 2008: 34 281 2009: 33 512 (305600*) 2010: 35 201 2011: 22 363 2012: 26 773</p>	<p>2006: 24914' 2007: 35680' 2008: 32820' 2009: 33300' 2010: 35201' 2011: 21478' 2012: 26769'</p>	<p>2006: 48' 2007: 68 (65') 2008: 49 (46') 2009: 52 (50') 2010: 45 (45') 2011: 44 (36') 2012: 46 (43')</p>	<p>Port administration has contract with operator which collects sewages from ships by trucks and barges</p>	<p>2000/59/EC convention requirements implemented and the same as in HELCOM convention</p>	<p>Plans to have a pipeline system from Klaipeda passenger and cargo terminal to municipal sewer system by the end of 2014.</p>
<p>Port of Stockholm (SE)</p>	<p>2006:8 249 304</p>	<p>2006:</p>	<p>2006: ?</p>	<p>Port of Stockholm: 14</p>	<p>Yes</p>	

<p>http://www.stockholmshamn.se/</p> <p>Cruise Baltic port category: X-Large</p>	<p>2007: 8 222 336 2008: 8 692 362 2009: 9 015 726 9806000* 2010: 9 107 665 2011: 9 177 075 2012: 9 050 424</p>	<p>2007: 272 584 2008: 351 267 2009: 437 437 2010: 381 141 2011: 407 162 2012: 463 770</p>	<p>(260') 2007: 246 (255') 2008: 260 (265') 2009: 288 (293') 2010: 243 (261') 2011: 239 (263') 2012: 272 (274')</p> <p><i>The figures in brackets from Cruise Baltic and possibly represent all 3 Stockholm ports combined. (?)</i></p>	<p>stationary PRVs that are used in the daily operations of all of the shipping companies operating regular scheduled services. Offloading black and grey water is also possible at each of the quays used by cruise ships. Port of Stockholm has recently upgraded the PRF in Stadsgården/Masthamnen to increase the capacity of the facilities for roro/ropax (Viking Line) and cruise vessels. Where stationary reception facilities are not available, the Port can provide tank trucks to collect waste water if needed.</p>	<p>The service of disposing black- and greywater in port is included in the port fee.</p> <p>It is thus a general fee, based on the number of passengers, regardless of if the vessel offload black- and grey water or not.</p>	
<p>Port of Nynäshamn (SE) http://www.stockholmshamn.se/en/Our-Ports/Nynashamn/</p> <p>Cruise Baltic port category: N/A</p>	<p>2006:226113* 2007: 1 343 008 2008: 1 366 209 2009: 1 361 288 176800* 2010: 1 399 746 2011: 1 397 051 2012: 1 407 730</p>	<p>2006: 2007: 9 115 2008: 12 009 2009: 9 661 2010: 30 664 2011: 44 637 2012: 5 076</p>	<p>2006:? 2007: 4 2008: 5 2009: 5 2010: 15 2011: 23 2012: 3</p>	<p>Direct connections to the municipal waste water system not available.</p> <p>Port can provide tank trucks to collect waste water if needed.</p>		<p>In Port of Nynäshamn, investigations are conducted of how to handle black and grey water.</p>
<p>Port of Kapellskär (SE) http://www.stockholmshamn.se/en/Our-Ports/Kapellskar/</p> <p>Cruise Baltic port category: N/A</p>	<p>2006:1381798* 2007: 1 187 554* 2008: 954 014* 2009: 941 372 941 400*</p>	<p>2006: 2007:? 2008: ? 2009: ? 2010: ? 2011: ? 2012: ?</p>	<p>2006:? 2007:[5] 2008:[0] 2009:[0] 2010:[3] 2011:[1] 2012:[0]</p>	<p>Direct connections to the municipal waste water system not available.</p> <p>Port can provide tank trucks to collect waste water if needed.</p>		<p>In Port of Kapellskär, a treatment plant has been constructed and sold to the municipality. The construction of the</p>

	2010: 901 681 2011: 925 325 2012: 933 940					PRF on the quays will start shortly, when major reconstruction is being done in the port in order to be able to increase the traffic to and from the port.
St Petersburg (RU) Cruise Baltic port category : X-large “Passenger port of Saint-Petersburg” http://www.pasp.ru/	2006: 319800* 2007: 2008: 2009: 434500* 2010: 631920* 2011: 700000* 2012: [?]	2006:305835’ 2007:335502’ 2008:394827’ 2009:425665’ 2010:427500’ 2011:472000’ 2012:452000’	2006: 302’ 2007: 292’ 2008:311’ 2009:321’ 2010:304’ 2011:309’ 2012:307’	Direct connections to the municipal waste water system available the “Morskoi fasad” port area. In addition, tanker barges are operated by three different companies: - tanker / barge, max. quantity – 1266 m3 - tanker / barge, and fixed connection, max. quantity: 7 0003 - tanker / barge, max. quantity: 50 0003, max. discharge rate: 4 000 m³/h	No. Direct fees are collected in accordance with the national rules. Direct fee according to volumes is applied for collection wastes, including sewage, from passenger ships.	The St. Petersburg area includes five harbours serving passenger traffic. The main of these is the new “Morskoi fasad” opened 2009 on the Vasily island to cater for large cruise ships.
Visby (SE) http://www.gotland.se/portofvisby Cruise Baltic port category: Large	2006:77578* 2007: 2008: 2009:36000* 2010:52100* 2011:42800* 2012: [?]	2006:77578’ 2007: 62000 (62263’) 2008: 66000 (64324’) 2009: 36000 (32874’) 2010: 52000 (52067’) 2011: 43000 (42819’) 2012: 54000 (54158’)	2006: 104’ 2007: 80’ 2008: 74 (72’) 2009: 52 (53’) 2010: 66 (66’) 2011: 53 (53’) 2012: 60 (62’)	All the main berths (4,5,6,7), 4 Facilities, connected to the municipal sewage system.	General fee, 0,40 SEK/GT, included in the vessel fee.	There is no statistics on just international passengers. But in addition to the cruise calls, The regular ferry traffic to Oskarshamn and Nynäshamn carries around 1 500 000 passengers/ year (they use berth 5 and 6, the cruise ships 4 and 7)

4. Other Passenger ports with cruise traffic						
Port	No. of international passengers ¹⁰	No. of cruise passengers ¹¹	No. of cruise ship calls ¹²	Arrangement of port reception facilities for sewage (2013)	Application of the "no-special-fee" system for sewage delivery (2013)	Additional information
Gdansk (PL) http://www.portgdansk.pl/en Cruise Baltic port category: Medium	2006:156511* 2007:170782 2008:175100* 2009:147900* 2010:157000* 2011:150400* 2012: 141805	2006:9703' 2007:12193' 2008:13276' 2009:16753' 2010:8378' 2011:6787' 2012:8294'	2006:29' 2007:39' 2008:36' 2009:40' 2010:26' 2011:21' 2012:29'	Tank trucks, no direct discharge to sewer system.	1/3 of all delivered amount of sewage from ferries and cruise ships without additional fee.	Port of Gdańsk will make a sewage collecting project in 2014.
Kalmar (SE) http://www.kalmar.se/kalmarhamn Cruise Baltic port category: Small	2006:2990* 2007: 2008:1100* 2009:300* 2010:300* 2011:0* 2012:	2006:2717' 2007:1007' 2008:1100' 2009:1158' 2010:325' 2011:0' 2012:1235'	2006:6' 2007:3' 2008:4' 2009:2' 2010:2' 2011:0' 2012:3'	NA	NA	NA
Karlskrona (SE) http://www.karlskrona.se/ Cruise Baltic port category: Small	2006:414944* 2007: 2008:381000* 2009:352000* 2010:376300* 2011:434900* 2012:	2006:2460' 2007:3100' 2008:5778' 2009:1250' 2010:1000' 2011:680' 2012:850'	2006:3' 2007:4' 2008:9' 2009:3' 2010:2' 2011:1' 2012:2'	NA	NA	NA
Kemi (FI) http://www.keminsatama.fi/en/home.html Cruise Baltic port category: Small	2006:2000* 2007: 2008:1700* 2009:3400*	2006:2000' 2007:2020' 2008:2000' 2009:2145'	2006:4' 2007:3' 2008:3' 2009:4'	NA	NA	NA

¹⁰ Figures marked with star (*) are from Baltic Port List. Other figures 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

¹¹ Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

¹² Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

	2010:1800* 2011:2100* 2012:	2010:1773' 2011:2126' 2012:3145'	2010:3' 2011:4' 2012:3'			
Hamina/Kotka (FI) http://www.haminakotka.fi/ Cruise Baltic port category: Small	2006:12277 [error?] 2007: 2008:0* 2009:600* 2010:600* 2011:1500* 2012:	2006:0' 2007:0' 2008:0' 2009:302' 2010:380' 2011:0' 2012:542'	2006:0' 2007:0' 2008:0' 2009:1' 2010:1' 2011:0' 2012:1'	NA	NA	NA
Malmö (SE) http://www.cmport.com/ Cruise Baltic port category: Small	2006:156603* 2007: 2008:207300* 2009:159900* 2010:60700* 2011:63600* 2012:	2006:1350' 2007:565' 2008:500' 2009:625' 2010:850' 2011:777' 2012:0'	2006:4' 2007:2' 2008:2' 2009:2' 2010:2' 2011:2' 2012:0'	NA	NA	NA
Rønne (DK) http://www.roennehavn.dk/site/Frontsite/ Cruise Baltic port category: Medium	2006:1409000* 2007: 2008:1429000* 2009:1389000* 2010:1302000* 2011:1379000* 2012:	2006:16311' 2007:13046' 2008:16921' 2009:21864' 2010:14894' 2011:18095' 2012:31717'	2006:34' 2007:29' 2008:31' 2009:36' 2010:24' 2011:25' 2012:44'	NA	NA	NA
Saaremaa (EE) A port on the North side of Saaremaa island operated by the Tallinn port authority (close to Vohma town). http://www.portoftallinn.com/saaremaa-harbour Cruise Baltic port category: Small	2006:4909' 2007:2580' 2008:1974' 2009:1030' 2010:683' 2011:5655' 2012:1120'	2006:4909' 2007:2580' 2008:1974' 2009:1030' 2010:683' 2011:5655' 2012:1120'	2006:7' 2007:6' 2008:6' 2009:5' 2010:2' 2011:8' 2012:3'	NA	NA	NA
Aalborg (DK) http://www.aalborghavn.dk/ Cruise Baltic port category: Small	2006:0* 2007: 2008:0* 2009:0* 2010:0* 2011:0* 2012:	2006:2550' 2007:0' 2008:1813' 2009:3130' 2010:386' 2011:4596' 2012:6451'	2006:3' 2007:0' 2008:3' 2009:3' 2010:2' 2011:4' 2012:7'	NA	NA	NA

Aarhus (DK) http://www.aarhushavn.dk/ Cruise Baltic port category: Small	2006:0*	2006:26317'	2006:23'	NA	NA	NA
	2007:	2007:18043'	2007:16'			
	2008:26000*	2008:25536'	2008:21'			
	2009:22000*	2009:22815'	2009:14'			
	2010:6000*	2010:6325'	2010:3'			
	2011:39000*	2011:39472'	2011:18'			
	2012:	2012:39436'	2012:20'			

5. Total Baltic figures Cruise traffic calculated from Cruise Baltic 2013 statistics excluding Norwegian ports			
No. of international passengers ¹³	No. of cruise passengers ¹⁴	No. of cruise ship calls ¹⁵	Calculated average number of passengers/cruise ship:
2006: 88 700 000*	2006: 2 308041'	2006: 2100'	2006: 1099
2007:	2007: 2320617'	2007: 2035'	2007: 1140
2008: 91 000 000*	2008: 2833521'	2008: 2135'	2008: 1327
2009: 87 000 000*	2009: 3211113'	2009: 2207'	2009: 1455
2010: 86 000 000*	2010: 3184880'	2010: 2056'	2010: 1549
2011: 87 000 000*	2011: 3570369'	2011: 2160'	2011: 1653
2012:	2012: 3779349'	2012: 2312'	2012: 1635

¹³ Source: 2007-2008: Baltic Port List 2007 and 2008. Other figures marked with star (*) are from Baltic Port List. Some figures 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

¹⁴ Source: Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports

¹⁵ Source: Figures marked with dash (') are from Cruise Baltic 2013. Other figures from 2007, 2009-2012 have been received by HELCOM Secretariat directly from national administrations and ports