



Document title	Results of the questionnaire on fertilizer cargo handling in Baltic Sea ports
Code	6-2
Category	CMNT
Agenda Item	6 - Other ship-generated wastes and port reception facilities (including marine litter)
Submission date	23.08.2018
Submitted by	CCB
Reference	Outcome of MARITIME 17-2017, paragraphs 6.10-6.17

Background

HELCOM MARITIME 17-2017 considered the handling of fertilizer cargo in ports on the basis of the “Draft report on potential sources of nutrient inputs: Baltic Sea ports handling fertilizers” submitted by CCB to HOD 52-2017 (document 6-1 and presentation 7). The Meeting further agreed that there is a need for more information on the issue and this information should be collected by an official data request/questionnaire from the HELCOM Secretariat. Consequently, the Meeting requested the Secretariat and Sweden with the help of CCB to develop during the spring 2018 a draft questionnaire to be circulated for comments to interested Contracting Parties and Observers before it is sent out in its final form.

CCB, together with the Secretariat and Sweden, developed an online questionnaire on fertilizer cargo handling in the Baltic Sea ports. The questionnaire was circulated to HELCOM MARITIME contacts and observers on 25 June 2018. The deadline was extended until 21 August, but nevertheless only 11 responses were received.

Action requested

The Meeting is invited to consider the results of questionnaire based on responses received and discuss the possible needs to continue collecting information during 2018, as well as the means to do so.

Compilation of replies to Questionnaire on fertilizer cargo handling in Baltic Sea ports

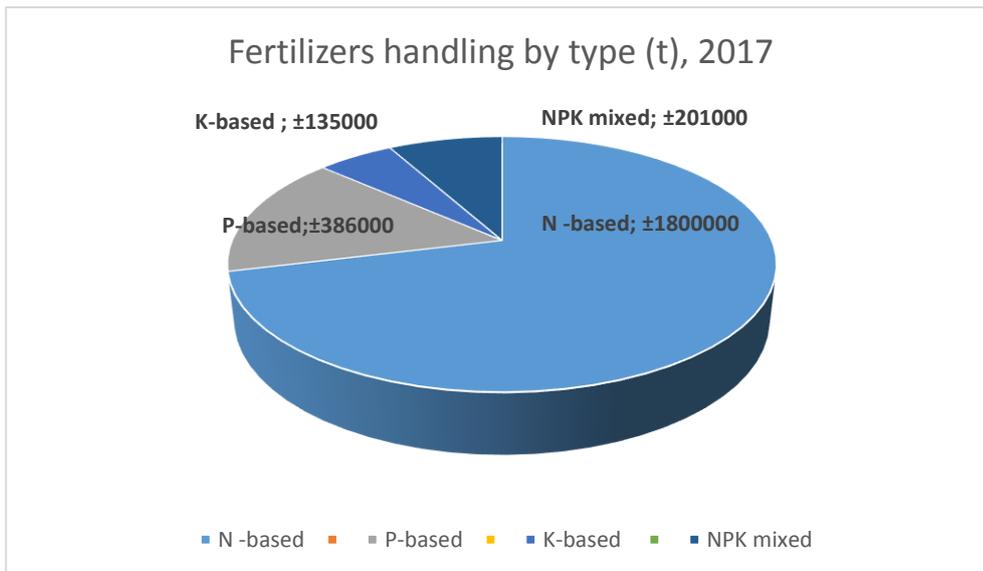
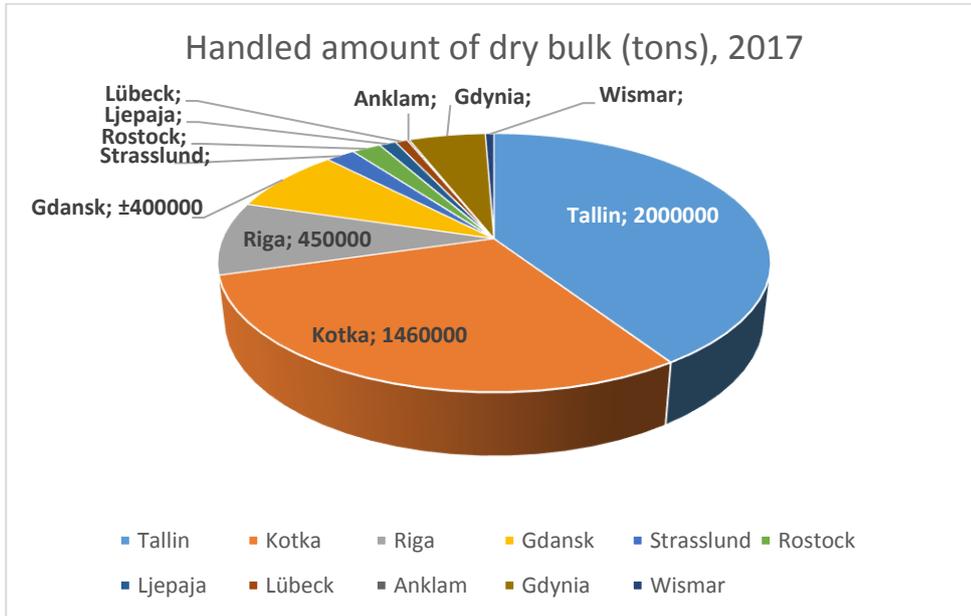


Table 1. Production capacities of Baltic fertilizer handling port terminals, 2017

Country/port	city	Website	Total amount of dry bulk (t)	Total capacity (t)	Liquid fertilizers, t	Storage	Capacity and type of storage facility	N fertilizers Amount, t	P fertilizers Amount, t	K fertilizers Amount, t	NPK Amount, t
1. Poland/ Baltic Bulk Terminal Ltd.	Gdynia	www.bbm.gdynia.pl	262 501	500 000	163 397	Y	2 silos of 10 000 m3 storage capacity each + 2 silos of 20 000 m3 storage capacity each + warehouse of flat storage - 3 000 m3	100 894			
2. Latvia	Riga	www.ALPHA-OSTA.LV	450000	120000	N	Y	Dome warehouses	350000	20000	10000	5000
3. Finland/Port of HaminaKotka Ltd	Kotka	www.haminakotka.fi	1 460 000	2 500 000	N	N		1 239 000	165 000		58 000
4. Fischerweg 408	Rostock	www.rfh.de	100.000	250.000	N	Y	25.000	20000			25000
5. Port of Stralsund c/o Seehafen Stralsund GmbH	Stralsund	www.seehafen-stralsund.de	100000					31000	11000	54000	4000
6. Latvia, port of Liepaja	Ljepaja	www.duna.lv	57000	57 000		Y	3 open roof storages - total of 4000 m2, where packed fertilizers are stored. As well we have closed warehouses of 6800 m2 for both - bulk and packed fertilizers	16700		1000	37300
7. Poland	Gdansk	www.portgdansk.pl	398232	398232	37579	Y	warehouses, open stores, tanks	86809	189819	69901	71486
8. Germany	Lübeck	www.hans-lehmann.de	41.936					30000	11000		no data
9. Germany	Anklam	www.Binnenhafen-Anklam.de	7552,86								
10. Estonia	Tallin	www.portofalinn.com	2000000			Y	Dome capacity from 8500 to 26000	35000	165000		
11. Germany	Wismar	hafen-wismar.de	30000			Y					
TOTAL			3042784,86					1 778 509	385 819	134 901	200 786

Table 2. Machinery and practices to minimize losses

Port	Equipment and techniques for handling	Any code of conduct or guidance	Estimation of losses from handling	Estimated losses from washing	Preventative measures at quay	Preventative measures at warehouse / port area	System of stormwater mngm	Any comments
Gdynia	Technical loading equipment for dry fertilizers includes: specialistic unloading station for discharging railcars + belt conveyors with capacity from 300 to 1,000 tons per hour (7 pieces) + four bucket loader + two legalized conveying scales which are installed on two belt conveyors on entry and exit of cargos to/from the warehouse + shiploader on rails for loading vessels size 35,000 DWT with capacity 6,000 tons per day.	Fertilizers Europe - Program Product Stewardship + BLU Code + ISPS Code.	The contractual natural losses of dry fertilizers are maximum 0.5% of the loaded bulk cargo	No, because Baltic Bulk Terminal doesn't discharge vessels. In fact, we don't clean holds of the ships after the closing of the unloading process.	Trained staff. Delivery of fertilizers only in specialized self-dumping rail cars. Hermetic technological line equipped with efficient filters. Automatic control and visualization system. CCTV monitoring. Using aspirators and ventilation. Systematic equipment inspections. Control of the goods by an independent surveyor. Prohibition to load goods to ships during rain or snow.		The system of stormwater management from quayside, port area and warehouse space is subject to the supervision Port of Gdynia Authority S.A. Stormwater are monitored and directed to port basins by separators or directed to the without drain tank, if they are contaminated	
Riga	2 railcars discharging station, 2 vessels's loading machines 2X800 mt/hrs	Yes - IMSBC code	less than 0,1%	No any losses from cargo holds	Special equipment to minimize losses		Special capacities	
Hamina Kotka	Covered conveyor system are used for wagons unloading and transporting cargo into warehouses. Inside the warehouses front loaders are used to load dump trucks or conveyor system. Two ship loaders fed with dump trucks or belt conveyor.	BLU Code, of IMO and Material Safety Data Sheets (MSDS) of producers		No info available	Terminal is using special techniques and equipment to avoid destruction and long free fall of fertilizers' particles with aim to minimize dust appearance.	Special coating, size and strength of granules done at production plant allow reduce dust. Conveyers at terminal are maximally covered from wind and precipitations.	Haminan ja Kotkan rannikkoalueen tulvariskien hallintasuunnitelma vuosille 2016-2021(pdf 22 144 kt) No english version	
Rostock	crane		yes	yes	by foil	by foil	No stormwater	
Stralsund	quayside cranes, mobile discharging machines, hopper/sinkhole		no losses		use of highest quality grabbers for fertilizers (grabbers close tightly)			
Liepaja	We have conveyor belts, tractors and warehouses. Also we have certified dry watering system, heat pistols for measuring temperature of cargo, all fire safety equipment, stickers, where its necessary etc.	No, not specific.	Sometimes we have losses during cargo handling process, but it is max 3%	Yes, sometimes, but it is very little.	Natural losses of cargo is normal, but it is just a little bit. If cargo is stored and handled in correct way, there are never losses found.		Our quayside is very high and warehouses are not directly connected to quay, so there is not necessity.	Before handling any new product or mixture of fertilizers, we always collect as much information as possible, such as Data safety sheet, certificates, descriptions etc.

Gdansk	The reloading cycle of bulk fertilizers or other bulk commodities in the port is practically in the "closed" system. Taking into account reloading operations carried out at the Chemików Quay (phosphorites, potassium salt), unloading is carried out by cranes on concealed conveyors and the goods enter the warehouse directly. In the case of loading soda or salt in bulk at the Przemysłowe Quay, the technology is similar. Another commodity, such as ammonium nitrate, is transported from the warehouse to the ship in bigbags. The transshipment facilities in the port are adapted to the reloading of goods dedicated to them. For the reloading of dusty goods, such as artificial fertilizers, tight transporting strings (conveyor belts and transfer towers) often equipped with various dedusting devices are used. The transports are finished with sleeves, which during loading reload into the hold, which limits dusting. Separate goods handling also reduces dusting	Depending on the class of goods (IMO), each terminal joining the reloading must have a Material Safety Data Sheet (eg ammonium nitrate, NPK fertilizers) and depending on its properties, precautions must be taken by the manufacturer. The trained employees are directed to this work. If dangerous material is present in the product (eg Canwil type fertilizers with different ammonium nitrate content), the transshipment operator must have a Technology Manual approved by the Director of the Maritime Office, specifying the technology of handling, handling and storage	no losses	no losses	Losses due to the transshipment of these goods are minimal. If there is a spillage from the conveyor belt, it is removed on a regular basis. In the final stage of unloading, there is a trimmer in the holds, which can be done manually or with the help of the Bobcat mini loader. Reloading is also carried out with grabs directly to the bag carrier, where the goods are immediately bagged and transported to the warehouse or storage yard.	ditto	no data		
Lubeck									
Anklam		No	Not relevant, low amounts	Not relevant, low amounts		Natural losses of cargo is normal, but it is just a little bit. If cargo is stored and handled in correct way, there are never losses found.	Not relevant, its a river transport harbour		
Tallinn	We are using specially designed fertilizer conveyor system and shiploader (the best available technology). All the conveyors are closed in galleries and equipped with dust filters. The shiploader have special cascade type loading spout (to minimize any dust extraction). Loading rate is 750t/h.	The standard of quality management system ISO 9001: 2015			The shiploader have special cascade type loading spout (to minimize any dust extraction).	The availability of such a warehouse complex allows for the separate storage of various types of fertilizers, thus ensuring the high safety of their qualities and properties (less cleaning - less losses)	It is well resolved by the Port. The stormwater does not have any contact with the fertilizer.		
Wismar									