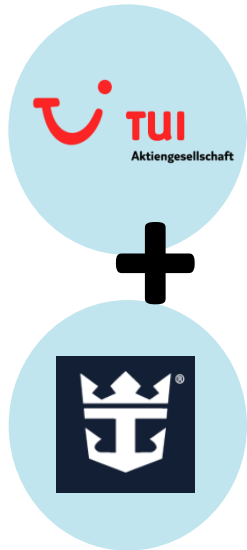


New PRF in Kiel- Experience from TUI Cruises

7th HELCOM Cooperation Platform on Port Reception Facilities (PRF) in the Baltic Sea

Lucienne Damm, Senior Environmental Manager, TUI Cruises

Hamburg, 13th September 2017



- Joint venture: 50 % TUI Aktiengesellschaft & 50 % Royal Caribbean Cruises Ltd.
- Since 2009 take people on their holiday at sea with our well-being fleet, providing more than 8,848 beds in total.
- The *Mein Schiff* fleet will comprise 6 newbuilds in 2019
- Our Newbuilds 2018 & 2019 will replace the *Mein Schiff 1* as well as *Mein Schiff 2* – leaving us as one of the youngest and most modern cruise fleet
- Environmental Officers are planning each voyage carefully regarding all environmental operation such as solid waste (hazard. & non hazard.) management, waste water management, incinerator operation, ballast water operation, chemical management etc.

Overview

TUI Cruises & the Baltic

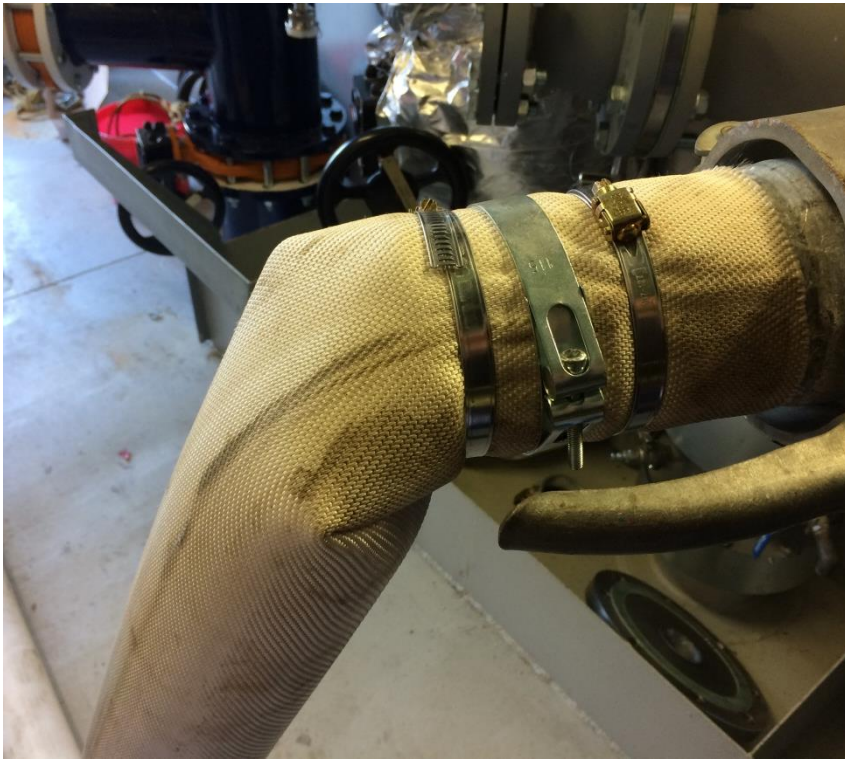
- In 2017, Mein Schiff 3 & Mein Schiff 6 deployed in the Baltic
- Baltic routings included in our itinerary since the beginning
- Company policy for all waste water discharge is 12nm from nearest land or shore side discharges
- Regular use of shore side facilities for waste water landing in the past (above & beyond compliance, CLIA Commitment)
- Installation of Advanced Waste Water purification systems in new builds
- Scanship AWP system is prepared to meet the new IMO Marpol MEPC 227(64) standard for special area Baltic Sea
- In 2019: all TUIC ships will have an AWP that is prepared for Baltic special areas
- Evaluating retrofit depending on PRF conditions



New PRF in Kiel– Experience so far...

Mein Schiff newbuild: AWP effluent offloading

Ship side connection/ Grey water hose



2017: Experiences with new PRF in Kiel

Opening ceremony with TUI Cruises in June 2017

- Official opening in June 2017 with Mein Schiff 3
- New PRF offers free offloading from Grey- and Blackwater up to 500 m³
- Both cruise ship piers are connected and can operate at the same time
- MS3 and MS6 offloaded at the same time without any problems so far
- Only one improvement potential: providing a bigger hose for customer to speed up the discharge



2017: Experiences with new PRF in Kiel

Offloaded quantities so far...

Ship	Date	Quantity in m ³
Mein Schiff 6	18.06.2017	75,00
Mein Schiff 6	28.06.2017	210,00
Mein Schiff 6	08.07.2017	104,00
Mein Schiff 6	18.07.2017	207,00
Mein Schiff 6	26.07.2017	657,07
Mein Schiff 3	28.07.2017	539,97
Mein Schiff 6	03.08.2017	378,00
Mein Schiff 6	13.08.2017	450,00
Mein Schiff 3	01.09.2017	300,00

TUI Cruises conclusion so far

- Close & continuous communication between port and customer
- Planning process was transparent and involved cruise lines as important stakeholder to evaluate their needs
- Overall concept is attractive (service of two berths, high free volume included in general fees)
- One of the best-practice facilities in the Baltic for TUI Cruises



Current experiences with Baltic PRF

(apart from Kiel)

- Most effective port reception facilities are those with fixed reception points on the pier.
- Stockholm and Helsinki are good examples of ports with this type of reception facility. Additionally, these 2 ports include an unlimited amount of black and grey water discharge in the vessel's MARPOL fee.
- Only one of the piers in Copenhagen has a fixed reception point the ship can connect to (only untreated black water), Grey water requires an additional fee and bioresidue cannot be accepted. This makes it difficult to land for ships with AWP systems.
- Tallinn has one shoreside connection available, but the other berths require truck service (covers only 7m³ in fee) → hardly enough to make the operation worthwhile (3 minutes of discharge).

Remaining Challenges...?

Remaining Challenges

Looking at the operations – its simple:

➤ Communication

- involvement of cruise lines in strategic planning of ports is limited so far (important for getting all information on needs of customers)

➤ Cost

- no special fee scheme helps to use PRF more frequently and to encourage cruise lines to discharge shore side

➤ Availability

- adequate PRF are not sufficiently available, the trucks and barges that are provided makes discharges complicated and ineffective

➤ Time

- long waiting time in busy ports means shorter/ less discharge volumes

Greatest challenges

Cooperation & Dialogue – more questions than answers

- What will the Ports do?
- What information do Ports need from Cruise liners to plan properly?
- What PRF infrastructure & cost schemes will be offered in the future?
- What strategic approach to take? Ship side solutions (invest in AWP/ MEPC 227(64)) and/ or port side solutions (adequate PRF)?



Thank you!

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