

Report of the

GREEN CRUISE PORT

Sustainable Development of Cruise Port Locations

**Workshop “Maritime and Landside Traffic Challenges of Cruise Terminals” for the
Green Cruise Port project**

in Rostock, Germany March 30th, 2017

Organized by ROSTOCK PORT

Introduction – the workshop as part of the Green Cruise Port project

After the first workshop seminar organized under the Green Cruise Port project held in Helsinki, Finland on Thursday 10th and Friday 11th of November 2016 on the topic “Green Cruise Port Innovative Waste Management and Reception Facilities”, the second workshop was due and successfully organized in Rostock. Originally scheduled for the beginning of January, it was finally carried out on March 30th, 2016. The workshop is thematically part of the work package 4: "Smart Cruise Port Traffic Solutions (incl. Accessibility) and Economic Effects". The seminar included speeches of several market players active on land- as well as seaside, presentations in different workshop sessions and accompanied by a site visit of the cruise terminal Rostock-Warnemünde in the afternoon. In addition to the site visit, the participants had the opportunity to get insight into the maritime simulation center of the University of Applied Sciences Wismar / Warnemünde, where different ship simulation scenarios and the technology as such were demonstrated.

Attached to this wrap up are the workshop’s agenda and the list of participants. The workshop started with an opening and welcome speech by the project’s lead partner, HPA Hamburg Port Authority (represented by Ingo Fehrs) and the host, ROSTOCK PORT GmbH, Mario Lembke.

Both emphasized the importance of the workshop topics for the entire region and the cruise industry present in the Baltic Sea Region. Growing and growing cruise ships, both in terms of ship dimensions and number of passengers result in huge challenges for cruise port operators and need a stronger cooperation between the port industry and the cruise vessel operators. The presentations given during the workshop should give a valuable input and provide a basis for discussions as well as to find suitable solutions for all market players.

Introductory round into the workshop's thematic focus

In the beginning of the workshops, representatives of the partnership, gave short overviews about the connectivity of the respective cruise terminals to their hinterland. In this first thematic part, the accessibility of the cruise ports in Rostock (Germany), Esbjerg (Denmark), Klaipeda (Lithuania), Helsinki (Finland) and Tallinn (Estonia) was demonstrated to the attendees of the workshop. Clearly to see and common to all cruise ports in the Baltic Sea Region is the fact, that infrastructure conditions are quiet good and in most cases sufficient to current requirements set by the cruise vessel operators. However, there are potentials for further improvements of the port infrastructures according to future needs and future ship dimensions, which needs to be analyzed. All ports can provide several berths for cruise ships in a dedicated cruise port area and very close to touristic attractions of the specific destination. Hinterland accessibility is generally ensured through connections to the national road network. From a maritime perspective, all ports - except from Esbjerg - can accommodate cruise vessels up to 300m and are thus ready for calls of the typical maximum size in our region.

First session: Maritime Traffic Challenges of Cruise Ports

The first session focused on a very important topic for cruise port operators, the effects on bigger and bigger ships on the seaside port infrastructure. Against this background, the partner ROSTOCK PORT has awarded a study to the **University of Applied Sciences Warnemünde**, which should analyze the requirements to future port infrastructures. In this study, the consultant simulate different scenarios of cruise ship calls in exactly defined infrastructure design concepts in the cruise port of Rostock-Warnemünde. One important result of that simulation runs are basic recommendations to the industry for future planning activities. **Prof. Thomas Böcker**, head of the responsible department, presented first study results and simulation technologies in the beginning of the workshop.

The auditorium noted the respective circumstances of such simulations - which are generally possible for any cruise port - as very important: the concrete sea area, the dimensions of a typical design ship and different weather conditions. The experts definitely recommend doing several simulation runs for each development scenario in order to ensure reliable results. With view on the defined simulation scenario, the external experts revealed that future - which means bigger cruise ships - could moor in the today's cruise ports only, if specific infrastructure works are adapted. Otherwise, not every berth can accommodate cruise vessels at the same time safely, which hardly limit the options a port operator has to assign ships to its terminals. Given this basic results from the study, it is strongly recommended to simulate nautical and infrastructural conditions while improving or extending port infrastructures.

In the afternoon of the first day, the workshop participants took part in a study tour to the simulation center in Warnemünde and could follow the ongoing simulation run. To gain a feeling, how difficult it is to operate a huge cruise vessel into a narrow port area, some could take over the control of the simulator and steer the vessel to the pier. Sometimes it worked, sometimes not. However, the attendees got insight into the maritime perspective and consequences of the infrastructure development activities from a maritime point of view.



In addition to that, the **pilots association of Rostock-Warnemünde** gave a short overview about their views on that topic. **Torsten Vetter** basically confirmed the speech of Prof. Böcker, but at the same time pointed out a second maritime aspect of bigger and bigger cruise ships in ports: conflicts between mooring operations in cruise terminals on the hand and incoming as well as outgoing ferries and bulk cargo vessels on the other.

Both operations should take the needs of the others into consideration in order to avoid nautical conflicts and ensure safe navigation throughout the port area. This general principle affect the definition of cruise terminals and port infrastructure as well.



Second session: Landside Traffic Challenges of Cruise Ports

After the discussion of the seaside dimension of the bigger cruise ships, the following speeches and presentations focused on the landside perspective. Even from that perspective, huge challenges affect the planning and design works for cruise terminals around the Baltic Sea Region. Every port needs to consider regional specific requirements in its development plans, but there are also some general applicable aspects, which have to take into account. Port users, e.g. touristic service providers and cruise vessel operators, have identified those aspects.

In a first speech, **Nadine Maraschi** from **AIDA cruises** gave an insight into the company's environmental strategy and how this affect port operation and infrastructure adaption works. AIDA follows a strong sustainability strategy and developed high standards for its implementation, e.g. reduction of emissions, consumption of natural resources and energy efficiency. To fulfil its self-imposed goals, AIDA develops joint actions in close cooperation with port and terminal operators. The only way to be successful is cooperation between both market actors.

Furthermore, Nadine Maraschi formulated general guiding principles from a vessel operator's point of view: a) adapt terminal infrastructure according to real needs, no great dreams; b) provide sufficient terminal space, e.g. maneuvering areas for busses and service trucks and parking space for cars; c) establish reliable transport concepts for cruise passengers and improve sign posting, both for public transport to/from the terminal as well as for individual travels; d) separate service traffic from passenger traffic to ensure safe terminal operation; e) better information about tour busses and which trip they do in order to allocate passenger flows much better on a given terminal area; f) assign operational areas on terminals per vessel operator to avoid a mix of passenger flows; g) try to organize your terminals in this way, that check-in and check-out can be organized at the same time due to short port times of bigger and bigger ships; e) improve the information exchange between all actors providing services in and around the terminals.

These general principles may differ from time to time, port to port and in case of a transit call or turnaround call. As good example, the recently established 'seamless travel concept' - established in the cruise port Rostock-Warnemünde, was mentioned in this context. A cruise terminal gives the first impression of a destination to the cruise passenger and thus heavily affect the decision to stay away for the next time or come back, so Nadine Maraschi.



Supplementary to a cruise vessel operator's point of view, **Marco Hafemann (Conference & Touring)** presented his view on that topic from the perspective of a touristic service provider. Based on the example Rostock, he clearly described huge challenges for Baltic Sea cruise ports in handling and serving bigger cruise ships. On more than 20 days during the cruise season, two or more ships were in the same port, around 80 trains dispatched for trips to hinterland destinations like Berlin and nearly 100 local guides hired for day tours ... all this under the given terminal infrastructure.

Marko Hafemann also pointed out, that the growing ship size and shorter call frequencies makes it more difficult to provide reliable services around cruise terminals and that solutions for that conflicts needs to be developed from all actors. As example: In 1991, the biggest cruise ship (1.400 passenger) came every 14 days during a six months season. In 2000, the typical vessel capacity was already 2.200 passenger, the trip time 12 days during the high season of three months. This development will continue.

Most of all, the availability of transport resources are huge challenges for service provider. They have to contract e.g. bus companies from far away regions and thus require better sign posting to/from terminal areas. Even the present terminal infrastructure needs in some cases improvement actions: e.g. no man-made obstacles like tunnels to and from terminal or traffic areas (like tunnels or no barrier-free walkways); short and easy to find routes from the terminal to the train station or platform. He coincides with Nadine Maraschi mentioning that a separation of handling and service areas for different vessel resp. vessel operators is mandatory in order to avoid a passenger mix. Altogether, a strong cooperation between all actors at the given location will definitely help to find solution for the terminal operator and the service provider.

In the afternoon part of the session about landside traffic challenges of cruise ports, the infrastructure provider presented some facts and views on that.

First, **Hermann Grünfeld** from project's lead partner **HPA Hamburg** presented some facts about their experiences in developing cruise terminals. Based on their lessons learned, he gave insight into the terminal development process at Hamburg Steinwerder, the newest terminal there. The entire process is and was based on requirements or recommendations set/given by cruise vessel operators, e.g. stops for approx. 20 busses at the same time, nearly 2.000 parking lots around the terminal building, waiting areas for 200 taxis, covered walkways for foot passengers and reserve areas for future transport growth. In this context, a comprehensive terminal master plan has been developed and partly presented at the workshop.

What happened after the terminal was in its operational phase? The result was surprisingly unexpected: only 11 busses were at the terminal in peak periods, so half of constructed bus stops would have been sufficient. Only 57 out of 80 parking slots for service trucks are regularly used, only two third of the provided capacity. Based on that, Hermann Grünfeld recommend not to focus as strictly as possible on requirements made by cruise operators, but to focus on a more demand oriented development process. That means: a) provision of parking areas according to real demand, but provision of nearly ready areas; b) centrally organized logistics processes around the terminal instead of provision of maximum capacities; c) transparent transport concepts based on shared information between all involved companies; d) to quantify improvement potentials and consideration of unused areas for other activities before development of rural fields and finally e) step-by-step development of cruise terminals according to real needs.

The aim of the organizers was to incorporate even the view of non-partner ports into the discussion. For that, the organizers invited representatives from **Stockholm (Henrik Alquist)** and **Kaliningrad (Nikolaj Mamenko)** to share their views and experiences.

Henrik Alqvist presented the ongoing infrastructural development activities in Stockholm. Currently, the port operator handles the majority of cruise vessels at different port locations around Stockholm. However, there is huge development process ongoing in Värtahamnen, today Stockholm's most important ferry and cruise ferry terminal. An initiated complex reorganization process includes a complete restructuring of terminal areas as well as terminal buildings and reclaiming of former water areas.

This process is close to be finished, a new terminal building is erected and put into operation and two additional cruise piers for ships up to 260m in length available at the end of 2018. So far, Ports of Stockholm provide 10 berths for cruise ships, very good accessibility to public and individual transport and is further investigating more improvement actions. One of them is the installation of a new handling concept, called 'Seawalk' in Nynäshamn. This floating passenger bridge, known from the Americas, is already in operation and Stockholm is the only port in Europe, which can offer this solution for berths where a sufficient water depth is not the case. In addition to that, a new cruise pier with a length of 460m shall be available in 2020 and help to reduce infrastructural bottlenecks. Henrik Alqvist clearly emphasized the challenges from growing cruise ships for the port developing companies. He pointed out that current cruise ships are more than double in size than the former "already huge cruise ferry" 'Cinderella' is today. This heavily affect all development strategies and processes, so a close co-operation is an appropriate action and all actors should commonly decide what is needed and economically viable.



From Russia, Nikolaj Mamenko, demonstrated the development plan for a complete new cruise terminal at Kaliningrad. Based on the fact, that cruise tourism boost the regional development from an economically point of view and foster the intercultural exchange, the local government decided to close this infrastructural gap. Different studies from previous projects laid the planning foundation for the new terminal: berths with a length of 350m and a water depth of 10,50m should be sufficient to establish Kaliningrad as cruise destination and help the Russian exclave to make profit from this growing industry.

A new terminal in the small touristic village Pionersky along a former fishery port area is under development; jointly financed by the state owned port company Rosmorport and an unnamed private investor. The total investment amounts up to approx. 130 mln. EUR. The project consortium expect 225.000 passengers on 110 cruise vessels in a five-month cruise season. To ensure the year around economic viability, the terminal shall attract ro/ro-service outside the cruise season. Mandatory customs facilities are available for that business as well.



General conclusions of the workshop in Rostock

In all sessions, the speaker clearly demonstrated that the cruise industry is very important for the regional and local economic development. The port operator or port development companies facing huge challenges to make their infrastructures ready for bigger and bigger cruise vessels in the next years. Not only growing size is a challenge, even the growing number of passengers onboard a specific cruise vessel is fact which infrastructure provider should consider in their investment plans.

The speeches given during these two days provided a good basis for detailed discussions later on between the project partner and third parties, which attended the conference. The exchange of knowledge and experiences - either by questions and answer or bilaterally will facilitate the development of proper cruise port infrastructures around the Baltic Sea Region and make the entire industry ready for the future.

When it comes to the maritime dimension, it became apparent that the today's infrastructure not in every case support the growing ship size and different aspects affect the construction and design of cruise piers/terminals. For verification purposes of planned terminal designs, a simulation run might be a good opportunity to avoid mistaken investments. The participants came also to the conclusion, that port infrastructure operator do not have to follow strictly requirements set by the cruise vessel operators. Design or development processes should merely base on a continually exchange of information gained from a day-to-day business and experiences in the past of all parties involved. Dominating influence by one party alone will even result in oversize or not suitable terminal facilities.