

# City of Hamburg – Calling at the smartPORT







#### Faster, safer, cleaner

Intelligent infrastructure solutions increase efficiency, reliability, and environmental compatibility around the world

Ports are facing enormous technological and logistical challenges. A growing flow of goods must be reliably controlled and transported within a limited space – and at increasingly faster speeds. At the same time, these important hubs for global cargo and passenger services must meet ever higher standards of energy efficiency, environmental compatibility, and operating safety.

As an experienced partner to the port industry, Siemens supplies integrated systems and solutions worldwide – solutions that ensure reliable, efficient, and environmentally compatible port operation, both today and in the future.

siemens.com/iaph

# WELCOMETOHAMBURG

Welcome



GRANT GILFILLAN

IAPH President & Chief
Executive Officer/Director,
Port Authority of New
South Wales, Australia

It is my great pleasure on behalf of the International Association of Ports and Harbors to extend a warm welcome to members, visitors and sponsors, to Hamburg for the 29th IAPH World Ports Conference.

This event happens every two years and is a highlight in the calendar of all of us involved in managing Ports around the world. The theme of this conference under the banner of "smartPORT" along with the opportunity to experience and see one of the most iconic port/city environments on our planet, represents a unique opportunity. In truth, the port is the city and the city is the port.

This event will also be a significant point in history for our Association as we seek to redefine our future and what IAPH will offer for its members. We will be discussing a new Constitution which we believe will better position us to have a higher profile in our industry, and greater value and more relevance to our members. It is fitting that such a change should happen at a location where an abundance of history sits side by side with innovation and technology – past and future in harmony.

Most importantly this conference will allow us all to renew our friendships and business relationships, build new networks, and share information and ideas in the charming and friendly city of Hamburg.

Willkommen!

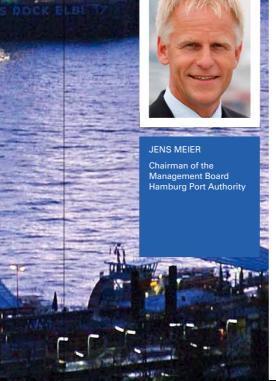


A very warm welcome to Hamburg and – as the North German greeting goes – "moin moin"! I am delighted that you have accepted our invitation to the 29th IAPH World Ports Conference. Some of you have travelled from very far to come here.

The conference brings together the stakeholders in the international maritime industry. Over the next five days we will debate a wide range of topics that concern all of us, share ideas and experiences and learn from each other. The topics will include intelligent traffic and trade flow solutions for ports and the achievement of an appropriate balance between the environment and the port industry. Legal issues in port development, the opportunities for and benefits of the cruise ship industry as well as clean air in ports will also be addressed in our discussions and talks.

I would also like to invite you to join us on a tour through our port. Visit our projects with us and see for yourself how we gradually make our vision of a smartPORT a reality. Our port excursions planned for the last conference day will span the "bridge between theory and practice" and offer you a sometimes exclusive glimpse at several smart projects. We are sure you will enjoy it!

I wish you exciting and thought-provoking discussions, and I am looking forward to inspiring talks with you.



City of Hamburg – Calling at the smartPORT

# INNOVATIONS that are great for our guests and the environment.

Alternative power supply AIDAprima has a shore pow connection for use during t time spent in port.

Thanks to the dual-fuel engine, our next generation of ships can be operated in port with environmentally friendly LNG.

In 2015 and 2016, our new ships will be setting new standards in environmental protection.

Did you know that:

- An AIDA ship today consumes an average of just 3 liters of fuel per person per 100 kilometers (confirmed by Germanischer Lloyd)?
- Our comprehensive filter system reduces emissions of soot, sulfur, and nitric oxides by 90 to 99 percent?
- The new ships have a shore power connection?
- Absorption chillers generate refrigeration for air conditioning from the waste heat of the engines?

For more information as well as our Sustainability Report, please visit www.aida.com/aidacares



#### Index

03
06 – 07
08 – 10
10
11
12 – 27
28 – 29
30 – 33
34 – 45
48







IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE



#### **General Information**

#### Banks

General banking hours in Hamburg are Monday to Friday from 9 am to 4 pm.

#### **Business Hours – Shops**

Shops in the city centre and shopping malls are open Monday to Saturday from 9 am to 8 pm. Shops outside the city centre usually close earlier. Supermarkets often open at 7 am and close at 10 pm. All shops are closed on Sundays.

#### Climate

All of Germany is in the temperate zone. At around 15°C (59°F), average temperatures in Hamburg in June are spring-like.

#### **Conference Venue**

Congress Center Hamburg (CCH), Am Dammtor / Marseiller Str., 20355 Hamburg

#### Consulates

There are very few cities in the world with as many consulates as Hamburg. Contact Senats-kanzlei (Staatsamt), Rieke Marxen, Rathausmarkt 1, 20095 Hamburg, Tel: +49 40 42831-1834 to check where you can find your country's diplomatic representation.

#### Currency

Like in all EU Member States the currency in Germany is the euro. The current exchange rate is about US\$ 1.1354 per euro (as of 15 May 2015).

#### **Emergency Phone Numbers**

Police: 110 Fire brigade: 112

Emergency doctor/emergency pharmacy service: +49 40 228 022

Emergency dental care service: +49 1805 05 05 18

#### Health

Doctor's offices are usually open Monday to Thursday from 9 am to 6 pm and Wednesdays from 9 am to 1 pm. Many surgeries are closed on Fridays. In addition 80 hospitals in and around Hamburg offer emergency services around the clock.







#### **Public Transport**

The public transport system, Hamburger Verkehrsverband (HVV), is an excellent way to get around the city of Hamburg and the surrounding area. Hamburg has four underground train lines [U-Bahn] and six overground lines [S-Bahn] that serve the entire greater Hamburg area. The S-Bahn services S1 and S11 run from the southwest of Hamburg via the central railway station straight to Hamburg Airport in the north of the city. Various bus services provide links between the U-Bahn and S-Bahn stations. Included in the city's public transport network are the Elbe ferries that carry passengers across the Elbe. For more information about the public transport network and ticket prices go to http://www.hvv.de/en/index.php.

#### Tax

The VAT currently applicable in Germany is 19 per cent. It is payable on all goods and services. Certain services are charged at 7 per cent VAT or are exempted from VAT. The lower tax rate applies, for example, to cultural offers, public transport or taxis as well as to hotel accommodation or stays in B&Bs.

#### **Taxis**

Taxi Hamburg: +49 40 666 666

Hansa Funktaxi: +49 40 211 211/ +49 40 311 311

Das Taxi: +49 40 221 122

A-Z JUMBO TAXI (jumbo taxis for up to 8 persons): +49 800 333 999 0

#### Tim

Central European Summer Time (MESZ/CEST/CEDT) in Germany is from the end of March to the end of October. Hamburg is one hour ahead of Greenwich Mean Time (GMT) and two hours ahead of Universal Time Coordinated (UTC).

#### **Tipping**

Tips are not usually included in the price of a service. There are no rules as to how much a guest should tip. The general guideline is 10 per cent of the invoice value.

#### **Tourist Information Offices**

Hamburg Tourismus GmbH: +49 40 300 51 300, www.hamburg-tourism.de

Tourist Office, central railway station: U/S-Bahn Hauptbahnhof, Hauptausgang Kirchenallee,

Mon – Sat 9 am – 7 am, Sun 10 am – 6 pm

Tourist Office, harbour: St. Pauli Landungsbrücken, between bridge 4 and 5,

Sun – Wed 9 am – 6 pm, Thu – Sat 9 am – 7 pm

Tourist Office, airport: Flughafen Fuhlsbüttel, Terminal 1+2 (arrival), 6 am – 11 am



# 2nd floor PLENUM HALL G Exhibition Area Food & Beverage Event Area

#### **Exhibitors**

Aanderaa Data Instruments AS	Booth No. 16
Becker Marine Systems GmbH & Co. KG	Booth No. 8
bremenports GmbH & Co. KG	Booth No. 17
Brunsbüttel Ports GmbH	Booth No. 10
Busan Port Authority, Ulsan Port Authority, Yeosu Gwangyang Port Authority	Booth No. 21
Cavotec International	Booth No. 20
Cisco Systems GmbH	Booth No. 2
Compass Publications Ltd	Booth No. 3.2
DCN	Booth No. 18
DVV Media Group GmbH "Red Sofa"	Booth No. 22
Esri (Environmental Systems Research Institute, Inc.)	Booth No. 24
Fraunhofer Center for Maritime Logistics and Services CML	Booth No. 15
Hamburg Port Authority	Booth No. 14
HAW Hamburg / E-Harbours Movement	Booth No. 31
Helmholtz-Zentrum Geesthacht, Centre for Materials and Coastal Research	Booth No. 26
Indonesia Port Corporations (I, II, III and IV)	Booth No. 1
INPLAN GmbH	Booth No. 9
Japanese Foundation for IAPH	Booth No. 13
Lufthansa Industry Solutions	Booth No. 23
Phaeros Group BVBA	Booth No. 25
Saab A.B.	Booth No. 27
Schneider Electric	Booth No. 3.1
Seaports of Niedersachsen GmbH, Niedersachsen Ports GmbH & Co. KG, Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG	Booth No. 19
Shibata-FenderTeam AG	Booth No. 30
Siemens AG	Booth No. 4
SteelWall ISH GmbH	Booth No. 6
Stemmann-Technik GmbH	Booth No. 7
Transnet National Ports Authority (TNPA)	Booth No. 5
T-Systems International GmbH	Booth No. 3.3
Vacon GmbH	Booth No. 28

**Exhibitors** 

IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE

# Programme SUNDAY, 31 MAY 2015

14.00 – 17.00	Meeting Officers / Strategy Meeting	Salon B Marriott Hotel
18.00	Reception Early Reception	Bricks Tea Bar Renaissance Hotel









IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT | 13

	ESDAY, 2 JUNE 2015  -09.30 Morning Coffee/Registration	Foyer CCH
09.30	<ul> <li>Opening Ceremony</li> <li>Grant Gilfillan, IAPH President &amp; Chief Executive Officer/Director, Port Authority of New South Wales, Australia</li> <li>Enak Ferlemann MdB, Parliamentary State Secretary at the Federal Ministry of Transport, Building and Urban Development</li> <li>Minister Frank Horch, Ministry of Economy, Transport and Innovation in Hamburg</li> <li>Jens Meier, Chairman of the Management Board Hamburg Port Author</li> </ul>	Hall G CCH
11.15	The digital Transformation of Business and Society, and its Impact on the Shipping, Ports and maritime Industries by 2030 Gern Leonhard, Futurist, Author, CEO The Futures Agency	Hall G CCH
11.45	- 12.00 Exhibition Area Opening Ceremony	Foyer
12.00	- 13.15 Lunch Break	Foyer CCH
13.15	- 13.30 Movie Welcome to the Port of Hamburg  Port of Hamburg: History & Geography	Hall G CCH
13.30	Transformations and Challenges in the global Economy  The Importance of smartPORTs in global Competition – Challenges and Solutions DiplIng. Marco Lippuner, Senior Vice President Infrastructure & Industr Sales, Siemens AG, Energy Management Division	CCH
14.00	- 14.30 Introduction Transformations and Challenges in the global Economy  What are the Threats and Opportunities for international Shipping in the Future? Peter Hinchliffe OBE, Secretary General International Chamber of Shipping	CCH
14.30	- 15.00 Coffee Break	Foyer CCH
15.00	The Global Economy at the Crossroads – recent Developments and Perspectives  PD Dr Christian Growitsch, Director of the Hamburg Institute of International Economics (HWWI)	Hall G CCH



15.20 - 15.40	Overview	Bigger Vessels – bigger Challenges	
	<b>The Evolution of Containership S</b> Jost Bergmann, Business Director	<b>Sizes and its Impact on the Industr</b> for Container Ships of DNV GL	ССН <b>У</b>
15.40 – 15.50	Statement	Bigger Vessels – bigger Challenges	Hall G
	<b>Mega-Ships: still for the commo</b> Olaf Merk, Administrator Ports and Forum (ITF) at OECD		CCH
15.50 – 16.00	Statement	Bigger Vessels – bigger Challenges	Hall G
	When a Mega Carrier enters the Capt. Salvatore Cafiero, Environme at MSC P/Sorrento- Italy	Port: Experiences of a Sea Captain ntal Manager & Training Officer	CCH
16.00 - 16.10	Statement	Bigger Vessels – bigger Challenges	Hall G
	<b>Traffic Control: Challenges and S of Mega-Ships on the River Elbe</b> Jörg Pollmann, Harbour Master of		CCIT
16.10 – 16.20	Statement	Bigger Vessels – bigger Challenges	Hall G
	Challenges and Solutions dealing Container Vessels – the Perspect Benjamin Lai, Managing Director D Modern Terminals Limited	ive of a Terminal Operator	CCIT
16.20 - 17.05		Bigger Vessels – bigger Challenges	
	Are there Limits to Growth? Who	rgmann, Olaf Merk, Capt. Salvatore Ca	
18.30	Dinner	Maritime Mo	useum

IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE

# Programme WEDNESDAY, 3 JUNE 2015

08.00 - 09.00	Morning Coffee		Foyer CCH	
09.00 - 09.20	Overview	smartPORT logistics: Challenges	Hall G	
	IT is ready for smart Solutions Volker Worthmann, Director Transport & Lo	gistics, Lufthansa Industry Solu	cch	
09.20 - 09.40	Overview	smartPORT logistics: Challenges	Hall G	
	Why do Ports have to become smart? Wim Elfrink, Executive Vice President, Ind Chief Globalisation Officer at Cisco	ustry Solutions and	ССН	
09.40 – 10.10	Coffee Break		Foyer CCH	

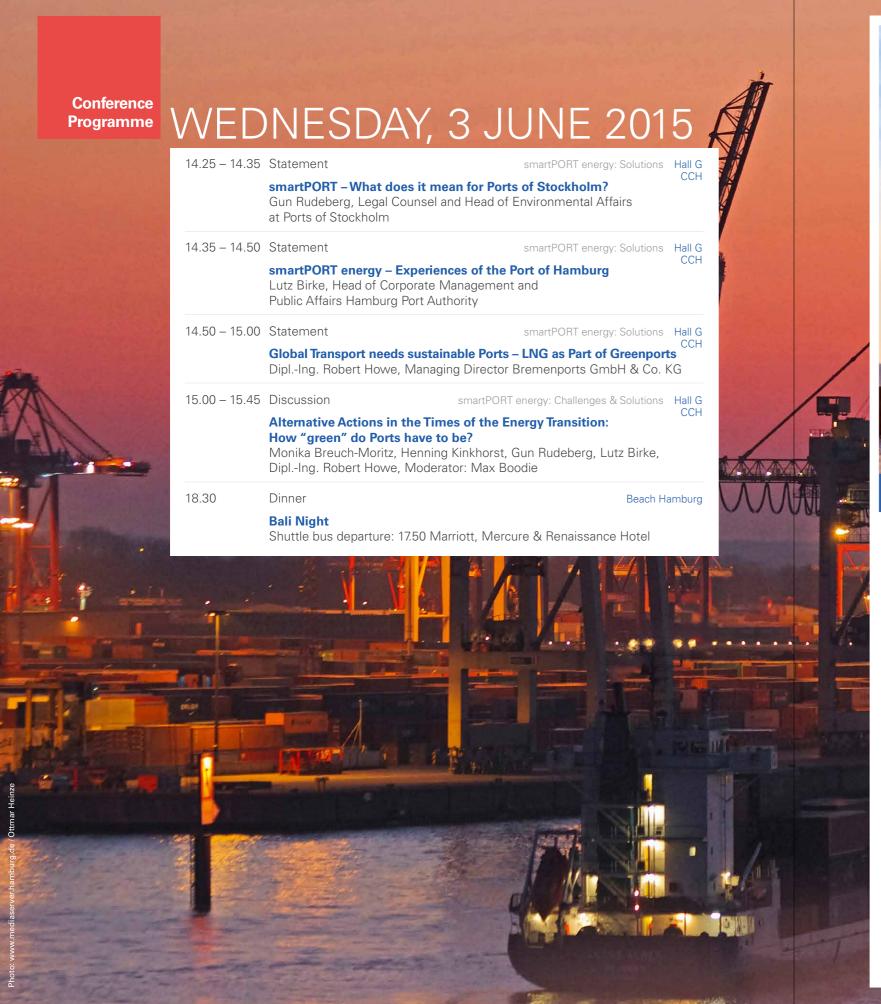


10.10 – 10.30	Statement  smartPORT Hamburg – "How to dress  Jens Meier, Chairman of the Management		CCH
10.30 – 10.45	Statement  An Arabian Perspective on Industry Trend A View from the Bridge of DP World Patrick Bol, Director Global Operations DF		Hall G CCH
10.45 – 10.55	Statement  What can a Port do to effectively mana Congestion – Truck Marshalling Automa Performance Indicator Control as a Solu Michael Pal, Principal Transport Analyst for	ation and Key ution	Hall G CCH

10.55 - 11.05 Statement smartPORT logistics: Solutions Hall G smartPORT Valencia - Challenges, Solutions and Visions José García de la Guia, Director of Information Technologies Valencia Port Authority 11.05 – 12.00 Discussion smartPORT logistics: Challenges & Solutions Hall G Demands on intelligent Ports: Where is there a Need for Action? Volker Worthmann, Wim Elfrink, Jens Meier, Patrick Bol, Michael Pal, José García de la Guia, Moderator: Max Boodie 12.00 - 13.00 Lunch Break 13.00 - 13.15 Movie smartPORT Hamburg Hall G Port of Hamburg: Vision & Future 13.15 - 13.35 Overview International environmental Standards at Sea - Development, Implementation and Monitoring. Consequences and future Developments Monika Breuch-Moritz, President of the Federal Maritime and Hydrographic Agency in Hamburg and Rostock 13.35 - 13.55 Overview smartPORT energy: Challenges Hall G How even minor Changes can increase Energy Efficiency significantly Henning Kinkhorst, Managing Director HPC Hamburg Port Consulting GmbH 13.55 - 14.25 Coffee Break



City of Hamburg – Calling at the smartPORT | 17 IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE





#### Welcome to the World Ports Conference!

From June 1st to 5th, the Port of Hamburg is where the world gathers. As the host of the **29th IAPH World Ports Conference** we are delighted to welcome you to the maritime summit to discuss highly topical issues on the basis of a trade-off between economic and environmental benefits.

What can we do to make our ports more efficient? How can we achieve environmental goals? What makes Hamburg a **smartPORT**? Let Hamburg inspire you - look forward to an exciting conference programme featuring top-notch speakers and fabulous social events.

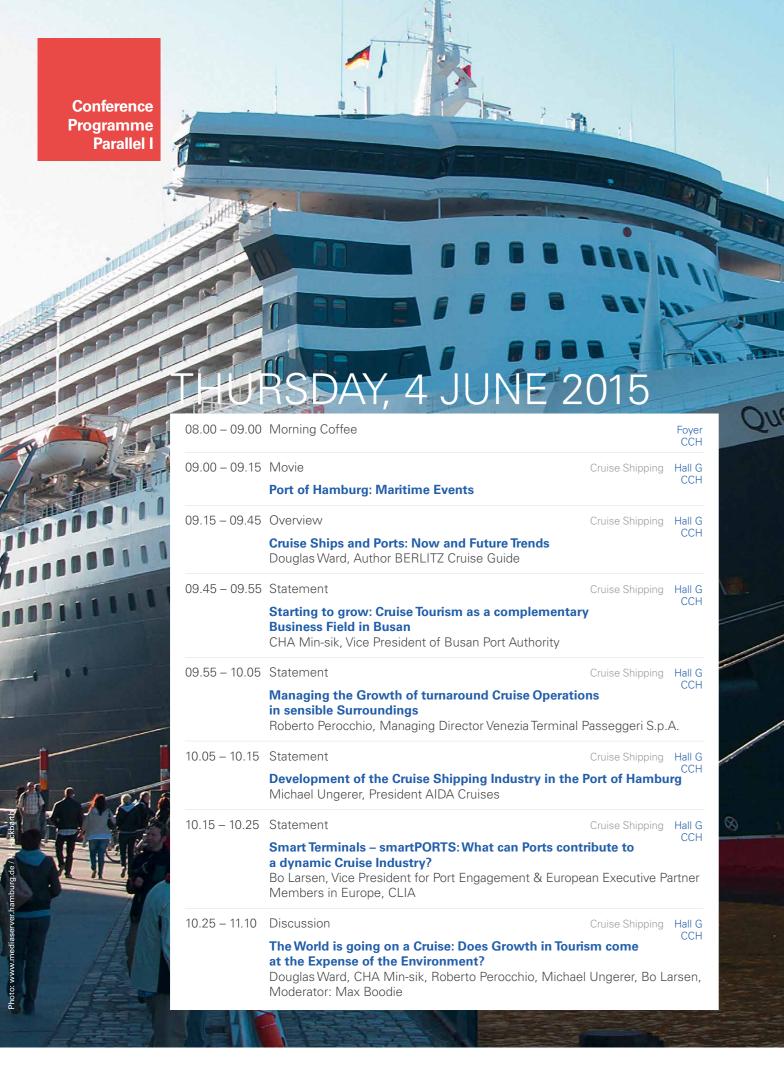
We wish you an enjoyable conference week!

City of Hamburg – Calling at the **smartPORT** 





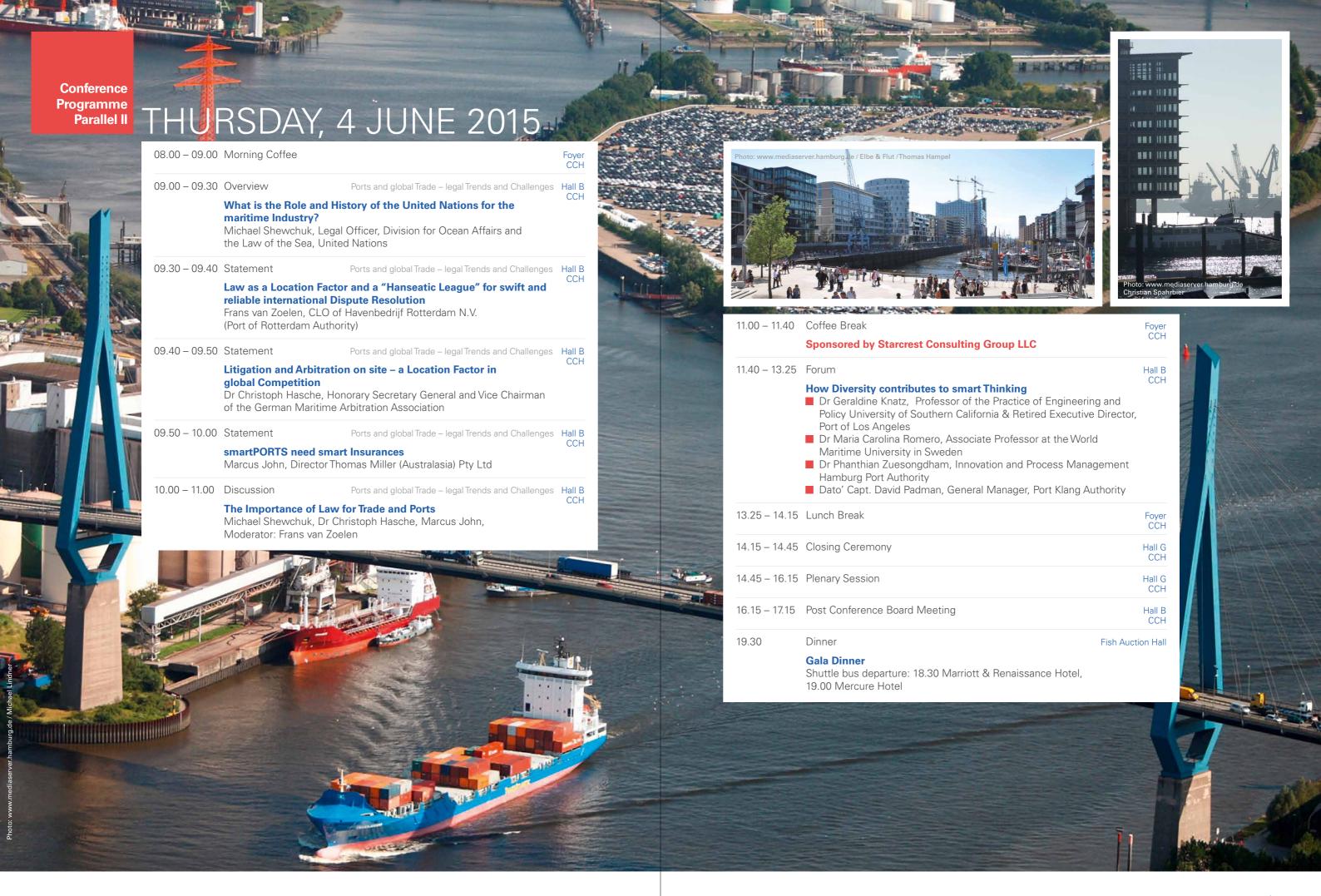
IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT 19



11.10 – 11.40	Coffee Break  Sponsored by Starcrest Consulting Group LLC		Foyer CCH
11.40 – 12.10	Overview  Clean Air in Ports – Potential for Improving Air Qualit Alexander Porschke, President of NABU Hamburg (Nature and Biodiversity Conservation Union)		Hall G CCH
12.10 – 12.20	Statement  Clean Air Solutions in the Ports of Copenhagen and Johan Röstin, CEO of Copenhagen Malmö Port AB	Clean Air in Ports Malmö	Hall G CCH
12.20 – 12.30	Statement  Clean Air 2.0  Gene Seroka, Executive Director of Port of Los Angeles	Clean Air in Ports	Hall G CCH
12.30 – 12.40	Statement  Hong Kong's Action to clean Up Maritime Emission Christine Loh, Under Secretary for the Environment, Hong Kong Special Administrative Region Government	Clean Air in Ports	Hall G CCH
12.40 – 13.25	Discussion  Corporate Responsibility and Business Challenge Alexander Porschke, Johan Röstin, Gene Seroka, Christ Moderator: Max Boodie	Clean Air in Ports	Hall G CCH
13.25 – 14.15	Lunch Break		Foyer CCH
14.15 – 14.45	Closing Ceremony		Hall G CCH
14.45 – 16.15	Plenary Session		Hall G CCH
16.15 – 17.15	Post Conference Board Meeting		Hall B CCH
19.30	Dinner  Gala Dinner  Shuttle bus departure: 18.30 Marriott & Renaissance H 19.00 Mercure Hotel	Fish Auct	ion Hall



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE 21



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE 23

## Workshops THURSDAY, 4 JUNE 2015

09.30 - 12.00 Workshop



#### **LNG for Shipping: Risks and Opportunities**

The European Commission has launched a study on the perception of the risks and opportunities of LNG as a shipping fuel. You are cordially invited to discuss with us the preliminary findings.

11.40 – 14.15 Workshop

Hall F CCH

SAP

Smart Ports, Smart Networks - Digitalizing Services with SAP







City of Hamburg – Calling at the smartPORT | 25 IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE









IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT 27

## Programme HAMBURG AT NIGHT



#### Sunday, May 31st, 18.00

#### **Early Reception**

All "Early Birds" arriving on Sunday are invited to join us for our Early Reception. The Bricks Tea Bar & Lounge at the Renaissance Hamburg Hotel offers the perfect setting to meet and catch up with delegates, network and socialise. Snacks and drinks will be served.

Recommended dress code: smart casual

Bricks Tea Bar, Renaissance Hamburg Hotel



#### Monday, June 1st, 18.30

#### **Welcome Reception & Dinner**

To start the conference week the Hamburg Port Authority and the Hamburg Chamber of Commerce would like to invite you to a Welcome Dinner at the premises of the Hamburg Chamber of Commerce in the Neue Börse (new stock exchange) building. Before that Hamburg's Rathaus (City Hall) will open its doors for an official reception hosted by the Senate of the Free and Hanseatic City of Hamburg.

Recommended dress code: smart casual

Shuttle bus departure: 18.00 Mercure Hotel, 18.15 Marriott & Renaissance Hotel Hamburg City Hall/Hamburg Chamber of Commerce

#### Tuesday, June 2nd, 18.30

#### **Maritime Dinner**

At the Maritime Dinner guests can go on an expedition through 3000 years of human history. The Maritime Museum is full of stories of explorers and conquerors, captains and common seamen. Spread over nine floors or "decks", as the exhibition spaces are called, exhibits of the world's largest private maritime collection are on display. Guests will also be treated to a sumptuous maritime buffet and given the opportunity to mingle and network.

Recommended dress code: smart casual

Shuttle bus departure: 18.15 Marriott, Mercure & Renaissance Hotel Maritime Museum

#### Wednesday, June 3rd, 18.30

#### **Bali Night**

Come along on a trip to the South Seas. The Indonesia Port Corporation invites to a Bali Night at Beach Hamburg. White sand under your feet, Balinese sounds and exotic cocktails will give you a first idea of the country that will host the IAPH World Ports Conference in 2017.

Recommended dress code: casual summer wear (The event will take place on sand. You may take off your shoes.)

Shuttle bus departure: 17.50 Marriott, Mercure & Renaissance Hotel Beach Hamburg



#### Thursday, June 4th, 19.30

#### **Gala Dinner**

The Gala Dinner will be one of the highlights of the conference. The Hamburg Port Authority has chosen to hold the event at Hamburg's Fish Auction Hall [Fischauktionshalle]: The traditional atmosphere of the market hall, situated directly on the banks of the River Elbe with a view of the harbour, will be a perfect setting. The event itself will be equally fascinating. Guests will be taken back in time to the 1960s when a band kicked off one of the greatest musical careers ever in Hamburg: the Beatles.

Recommended dress code: business attire

Shuttle bus departure: 18.30 Marriott & Renaissance Hotel, 19.00 Mercure Hotel Fish Auction Hall



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT | 29



#### **Option 1: Airbus**

Time: 10.15 – 16.00, Transport: by Bus/by Foot

Visit the Airbus headquarters in Hamburg, Germany, and meet the A380 from up close and personal. A shuttle bus will take you to the Airbus plant in Finkenwerder. After the Airbus tour you will enjoy lunch at the "Rilano River View Restaurant" before the bus takes you back to your Hotel.

Shuttle bus departure: 08.45 Marriott Hotel, 09.00 Renaissance Hotel, 09.15 Mercure Hotel

#### **Option 2: Holsten Brauerei (Brewery)**

Time: 09.00 – 14.00, Transport: by Bus/by Foot

Take a peek behind the scenes of the brewery located in the heart of Hamburg and enjoy an exciting journey through the world of modern-time beer brewing. Founded in 1897 Holsten Brauerei today is one of the largest brewery groups in Germany. The tour includes a visit to the production facilities, beer tasting and a hearty snack.

Shuttle bus departure: 08.10 Marriott Hotel, 08.25 Renaissance Hotel, 08.45 Mercure Hotel

#### Tuesday, 2 June 2015

#### Option 1: Model Railway & Hamburg by Double-decker Bus

Time: 10.00 - 16.00, Transport: by Bus

A shuttle bus will take you to Hamburg's Miniaturwunderland in the famous warehouse city [Speicherstadt]. The about two-hour-long tour will show you an extraordinary miniature world. 15,000 wagons on 13,000 metres of tracks – Hamburg's miniature wonderland is the home of the world's largest computer-controlled model railway. After lunch that will be served at a Hamburg-typical location, the uppermost floor of an old warehouse, a double-decker bus will whisk you off on a tradition-meets-modern-times tour through Hamburg.

Shuttle bus departure: 08.15 Renaissance Hotel, 09.00 Marriott Hotel, 09.30 Mercure Hotel

#### **Option 2: Hamburg on Foot & Model Railway**

Time: 09.30 – 16.15, Transport: by Foot

The alleyway quarter [Gängeviertel] and merchant houses, canals [Fleete] and warehouses as well as stories from the past, the Great Fire of 1842 and the cholera epidemic – all that forms part of Hamburg's development from a settlement to a city with more than a million inhabitants. Discover the many faces of the Hanseatic city. After the approximately two-hour-long tour, a well-deserved lunch will be waiting for you at a Hamburg-typical location, the uppermost floor of an old warehouse. Thus fortified you will be ready to enjoy a visit to the world's largest model railway, Hamburg's Miniaturwunderland.

Shuttle bus departure: 08.30 Marriott Hotel, 08.45 Renaissance Hotel, 09.00 Mercure Hotel

#### Wednesday, 3 June 2015

#### Option 1: Buxtehude & Visit to Obsthof Lefers (Orchard)

Time: 10.00 – 17.00, Transport: by Foot

Just outside the gates of Hamburg, at the edge of the Altes Land, you will find Buxtehude. After a visit to the port town, which was founded almost one thousand years ago and is known for its Gothic-style brick buildings, you will explore the countryside and visit an orchard located on the south side of the Elbe in Europe's largest continuous fruit-growing region. The day will come to a relaxing close with a cup of coffee and home-made butter cake and apple cake at the orchard.

Shuttle bus departure: 08.15 Marriott Hotel, 08.30 Renaissance Hotel, 08.45 Mercure Hotel

#### Option 2: Buxtehude & Tour through the Altes Land

Time: 10.00 – 17.00, Transport: by Bus

The tour through Buxtehude starts in the historical part of the town. You will walk along the old cobblestone street past the St. Petri church – the town's landmark, – the old town hall and the many century-old half-timbered houses. After the tour you will experience the beauty of the Altes Land, Europe's largest continuous fruit-growing region. In spring, when millions of fruit trees are in blossom, the area becomes a popular day-trip destination. The day will come to a relaxing close with a cup of coffee and home-made butter cake and apple cake at the orchard.

Shuttle bus departure: 08.15 Marriott Hotel, 08.30 Renaissance Hotel, 08.45 Mercure Hotel





#### Thursday, 4 June 2015

#### Option 1: On foot through the District of Blankenese & by Boat through the Port

Time: 10.00 – 14.40, Transport: by Foot/by Boat

A walk through the quaint staircase quarter [Treppenviertel] of Blankenese, Hamburg's picturesque district right on the banks of the Elbe, is particularly interesting. Climb up and down the many steps and you will be rewarded with spectacular views of the Elbe and the Altes Land. After an approximately two-hour-long walk, a launch boat will take you to Hamburg Landungsbrücken. On board you will learn interesting facts about the Port of Hamburg and enjoy a beautiful view of Hamburg and its port while having lunch.

Shuttle bus departure: 08.20 Marriott Hotel, 08.35 Renaissance Hotel, 08.50 Mercure Hotel

#### **Option 2: Hamburg Museum & Boat Tour on Lake Alster**

Time: 10.00 – 15.15, Transport: by Boat

If you want to know more about how the city developed from the missionary castle of Hammaburg into the proud Hanseatic city and proverbial "gateway to the world" of today, the Hamburg Museum is the place to go. The museum's building on Holstenwall was opened in 1922. Today it is the home of Germany's largest collection of city history. The visit will be followed by a boat trip on Lake Alster. Lunch will be served while you are gliding by green banks that are home to many water bird species and rare plants.

Shuttle bus departure: 09.00 Marriott Hotel, 09.15 Renaissance Hotel, 09.30 Mercure Hotel



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg — Calling at the smartPORT 31

#### OFFICIAL PORT TOUR

#### Friday, 5 June 2015

#### A Tour through the Port of Hamburg

Time: 09.30 - 13.30, Transport: by Boat

On a three-hour boat tour through the Port of Hamburg you will discover how, in Hamburg, intelligent port management works in practice. Intelligent infrastructure, innovative mobility concepts and energy efficiency form part of the HPA's strategy to make the Port of Hamburg a smartPORT. You will also experience the diversity of the universal port of Hamburg: the general and bulk cargo terminals, various warehouses, shipyards and Hamburg's unique shoreside infrastructure. The tour concludes with lunch at the Duckdalben, Hamburg's international seamen's club, around noon.

Shuttle bus departure: 08.45 Marriott Hotel, 09.00 Mercure & Renaissance Hotel



#### smartPORT EXCURSIONS

#### **Excursion 1: smartPORT logistics: From Collecting Information to Displaying it** Time: 09.00 – 13.30, Transport: by Bus

The tour through our intelligent port will give you the opportunity to experience the smart-PORT from up close. To introduce you to the concept of smartPORT logistics, we will show you on site how we collect traffic and infrastructure information and how we use it. On the example of a few selected pilot projects you will gain an idea of the technologies we deploy and the local particularities. One of the projects we will show you will be an innovative intelligent parking solution. We will also introduce to you the smartROAD project under which intelligent technology has been installed along a road section in the Port of Hamburg. The tour concludes with lunch at the Duckdalben, Hamburg's international seamen's club, around noon.

Shuttle bus departure: 08.15 Marriott Hotel, 08.30 Renaissance Hotel, 08.45 Mercure Hotel

#### **Excursion 2: smartPORT energy and Vessel Traffic Service (VTS) Centre** Time: 09.30 – 13.30, Transport: by Boat

You will be picked up from your hotel and brought to the pier, where a launch boat will take you on a tour through the port to show you some of our smartPORT energy projects. You will have the opportunity to look at our shore-power-for-cruise-ships projects and you see one of the world's most modern container terminals where electric AGV (Automated Guided Vehicles) are used. The last stop will be the VTS Centre, where you will disembark for a guided tour through the Port of Hamburg's new, ultra-modern heart of navigation. The tour concludes with lunch at the Duckdalben, Hamburg's international seamen's club, around noon.

Shuttle bus departure: 08.20 Marriott Hotel, 08.35 Renaissance Hotel, 08.50 Mercure Hotel

#### **Excursion 3: smartPORT energy: Shore Power for Cruise Ships** Time: 09.00 – 13.30, Transport: by Bus

This tour will take you to the two project sites in the Port of Hamburg, where shore power is supplied to cruise ships. You will be picked up from your hotel and taken to the cruise terminal in Altona. There you will have the opportunity to visit the first fixed shore power facility for cruise ships in Europe. Afterwards you will be taken to the cruise terminal in HafenCity where you can visit the second external-power-for-cruise-ships project in the Port of Hamburg. Here, the HPA installed the landside infrastructure to have power supplied to vessels via an LNG hybrid barge that generates electricity via motors powered by LNG. The tour concludes with lunch at the Duckdalben, Hamburgs international seamen's club, around noon.

Shuttle bus departure: 08.30 Marriott Hotel, 08.45 Renaissance Hotel, 09.00 Mercure Hotel



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT 33



Jost Bergmann

**Business Director for** Container Ships of DNV GL

In 2010 Jost was appointed business director for container ships at DNV and was confirmed in this position in 2013 after DNV and GL merged. In this function Jost is responsible for business development, e.g. planning, coordination and follow-up of activities that contribute to safer, smarter and greener container shipping. Mr Bergmann is a naval architect (MSc) by training and has more than 20 years of work experience in shipbuilding and shipping.

2 June 2015, 15.20, Hall G, CCH Overview 2 June 2015, 16.20, Hall G, CCH Discussion



**Max Boodie** 

Moderator 29th IAPH World Ports Conference

Max started his career in 1990 at a Dutch consultancy. Until 2005 he was actively involved in numerous procurement and logistics projects in the private and public sector. In 2005 he started a joint venture with DPA Group N.V., where he became a member of the two-member executive board in 2010. Since 2012 Max has been busy investing in technology-driven start-ups. Max Boodie is the author of several books about procurement and supply chain management. His most recent book is about temporary employment and staffing in the Netherlands from a sourcing perspective.

In 2013 he won everyone over when he moderated the "International Association of Ports and Harbors (IAPH) Africa/Europe Regional Meeting" in Amsterdam.



Lutz M. Birke

Head of Corporate Management and Public Affairs Hamburg Port Authority

Since 2010, Lutz M. Birke has worked for the Hamburg Port Authority: First he has been in charge for corporate and port strategy, since 1 May 2015, Lutz M. Birke has been in charge of corporate management and public affairs. His civil career started in 2005 with the Hamburg state parliament. In 2007 he first transferred to the state ministry of urban development and environment, in 2008 he became head of the state minister's office of the state ministry of economic and labour affairs. Birke holds a degree in business administration with a special emphasis on controlling and marketing.

3 June 2015, 14.35, Hall G, CCH Statement 3 June 2015, 15.00, Hall G, CCH Discussion



Director Global Operations DPWorld Head Office Dubai

Patrick Bol is a container terminal executive with over 25 years of experience in the port business, from the ship deck to the executive management. He managed terminals operations and led the business units in Rotterdam, Indonesia, Djibouti, Busan, Saigon and now holds the position of Director Global Operations of DPWorld's head office. He takes great pride in optimising logistical processes and achieving the impossible in the most challenging environments, from Africa to Europe, building and motivating multicultural teams that can achieve the highest productivity levels in a cost efficient manner.

3 June 2015, 10.30, Hall G, CCH Statement 3 June 2015, 11.05, Hall G, CCH



**Monika Breuch-Moritz** 

President of the Federal Maritime and Hydrographic Agency in Hamburg and Rostock

Monika Breuch-Moritz is a graduate meteorologist. In 1989, she joined the Federal Ministry of Transport, weather service division. She was a member of the German delegation to the Second World Climate Conference and IPCC. In 2007 Monika was made head of Climate and Environmental Policy in Maritime Shipping focusing on the further development of environmental regulations in shipping. In October 2008 she was named president of the Federal Maritime and Hydrographic Agency in Hamburg and Rostock.

3 June 2015, 13.15, Hall G, CCH Overview 3 June 2015, 15.00, Hall G, CCH Discussion



**CHA Min-sik** 

Vice President of Busan Port Authority

As the Vice President of Busan Port Authority (BPA) in South Korea Mr CHA is responsible for the overall business plan, management, budget and finances of BPA. He aims to develop Busan Port's role as a transhipment hub of the north-east Asian region through global planning and strategic vision by fulfilling those responsibilities. Mr CHA graduated from Seoul National University where he earned his BA and MA degrees in law. He also obtained his PhD in law by writing a thesis on the duties of nations and state-owned companies.

4 June 2015, 09.45, Hall G, CCH Statement 4 June 2015, 10.25, Hall G, CCH



**Capt. Salvatore Cafiero** 

Environmental Manager & Training Officer at MSC P/Sorrento - Italy

Captain Salvatore Cafiero grew up in a seaman's family. He was educated at the "Nino Bixio" Nautical Institute in Piano di Sorrento, where he graduated in 1980. After sailing in all ranks, he was promoted to master of a chemical tanker in 1988. In 1997 he started sailing with MSC, and proudly continued his career on last-generation container vessels. Today Cafiero is a training officer and environmental manager. He is also in charge of risk assessment of huge vessels of the MSC OSCAR and MSC LONDON classes and responsible for the MSC training site, using a full mission bridge/eng simulator.

Hall G, CCH 2 June 2015, 15.50 Statement 2 June 2015, 16.20 Hall G. CCH Discussion



Wim Elfrink

Executive Vice President, Industry Solutions and Chief Globalisation Officer at

In this role he is responsible for three global functions at Cisco: the industry solutions group, the emerging countries initiatives, and the company's globalisation strategy. Elfrink is an Executive Officer and sits on Cisco's operating committee. Elfrink is also recognised as Cisco's corporate entrepreneur in Residence, responsible for leading company-wide efforts in support of the "internet of everything" (IoE) and the "internet of things" (IoT). A core focus of Elfrink's global charter is to identify significant technology opportunities for city, country and business transformation.

3 June 2015, 09.20, Hall G, CCH 3 June 2015, 11.05, Hall G, CCH

IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT | **35** 





**Enak Ferlemann** 

Parliamentary State Secretary at the Federal Ministry of Transport, Building and Urban Development

2 June, 09.30, Hall G, CCH **Opening Ceremony** 



**Grant Gilfillan** 

IAPH President & Chief Executive Officer/Director, Port Authority of New South Wales, Australia

2 June. 09.30. Hall G. CCH Opening Ceremony







José García de la Guía

Director of Information Technologies Valencia Port Authority

Mr García has been working in the IT sector at the port of Valencia for 20 years. Since 2007 he's been working for the Valencia Port Authority in Spain, in the last year as the IT Manager. From 2004 - 2007 Mr Garcia worked for the Valenciaport Foundation, where he managed the creation process of the port community system, valenciaporpcs.net, and several research projects in the field of IT applied to logistics. Mr García holds a bachelor's degree in telecommunications engineering and an MBA from INEDE Business School – Valencia Catholic University in Spain.

3 June 2015, 10.55, Hall G, CCH Statement 3 June 2015. 11.05. Hall G. CCH Discussion



PD Dr Christian Growitsch

Director of the Hamburg Institute of International Economics (HWWI)

Christian Growitsch has held the position of Managing Director of the Hamburg Institute of International Economics (HWWI) since September 2014. Before that he served as a director of applied research and member of the management board of the Institute of Energy Economics at the University of Cologne. After studying business administration, economics and social sciences Christian earned his doctorate at the University of Lüneburg. In 2010 he earned his German post-doc degree at the University of Halle-Wittenberg.

2 June 2015, 15.00, Hall G, CCH Overview 2 June 2015, 16.20, Hall G, CCH



**Dr Christoph Hasche** 

Honorary Secretary General and Vice Chairman of the German Maritime Arbitration Association

As a managing partner of one of the leading German shipping law firms, Fleet Hamburg LLP, Dr Christoph Hasche specialises in assisting clients from the maritime industry in their day-to-day business, conducting court proceedings and maritime arbitrations. He has lectured at the International Tribunal of the Law of the Sea, the Bucerius Law School and the University of Hamburg. Christoph is a member of the International Bar Association, the German Association of International Maritime Law and the London Maritime Arbitrators' Association.

4 June 2015, 09.40, Hall B, CCH Statement 4 June 2015. 10.00. Hall B. CCH Discussion



**Dipl.-Ing. Robert Howe** 

Managing Director Bremenports GmbH & Co. KG

Robert Howe was born in 1962. He graduated with a master of science in civil engineering from TU Braunschweig (the Brunswick Institute of Technology) in Germany in 1992. Mr Howe started his career with Philip Holzmann AG, a German building and construction company based in Hanover, where he worked for around 10 years. In 2002 he changed employment to Ed. Züblin AG, a German building and construction company with offices in Bremen and Hamburg. Mr Howe joined bremenports Ltd., the publicly owned ports management company of the state of Bremen, as Managing Director in 2012.

3 June 2015, 14.50, Hall G, CCH Statement 3 June 2015, 15.00, Hall G, CCH Discussion





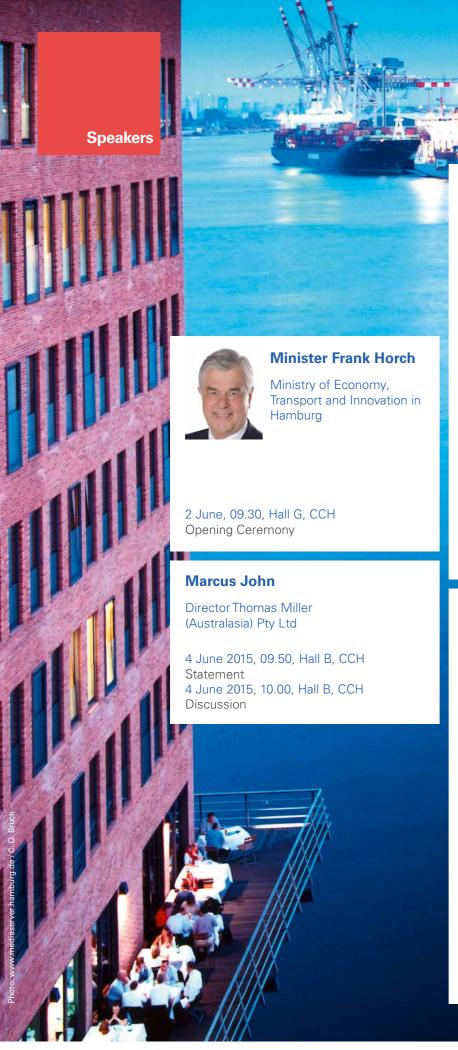
**Peter Hinchliffe OBE** 

Secretary General International Chamber of Shipping

Peter Hinchliffe enjoyed a first career in the British Royal Navy, that included over 20 years at sea and 5 years in seagoing command. As well as benefitting from naval professional training he also gained a civilian BSc (Hons) in management. Peter joined ICS in 2001 and for several years led ICS representation on maritime safety, security and environmental issues at the IMO and in other forums. In 2010 he was appointed Secretary General of ICS.

2 June 2015, 14.00, Hall G, CCH Introduction







#### **Henning Kinkhorst**

Managing Director HPC Hamburg Port Consulting GmbH

HPC is one of the world's leading management consulting companies in the port and transport sector. Prior to joining HPC in 2014 Henning gained over 15 years of industry experience in various senior management positions with Germanischer Lloyd SE and the A.P.Moeller / Maersk Group. Throughout his professional career in shipping and logistics, he has worked on many projects worldwide e.g. optimising network deployments, market positioning in the Asia/Pacific region and fleet development strategy for next-generation vessels.

3 June 2015, 13.35, Hall G, CCH 3 June 2015, 15.00, Hall G. CCH Discussion



#### **Dr Geraldine Knatz**

Prof. of the Practice of Engineering and Policy University of Southern California & Retired Executive Director, Port of LA

Geraldine Knatz served as the executive director of the Port of Los Angeles from 2006 to January 2014. She was the first woman to serve in this role and made a significant impact through the creation and implementation of the San Pedro Bay Ports Clean Air Action Plan, an aggressive plan that reduced air emissions by combined port operations of over 70 per cent over five years which is recognised around the world for its innovation and success. In 2014, she was named a member of the National Academy of Engineering in recognition of her international leadership in the engineering and development of environmentally clean urban seaports.

4 June 2015, 11.40, Hall B, CCH





Managing Director DaChan Bay Terminal, Modern Terminals Ltd



2 June 2015, 16.10, Hall G, CCH Statement 2 June 2015, 16.20, Hall G, CCH Discussion

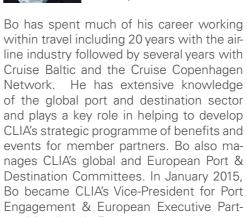


**Bo Larsen** 

Vice President for Port Engagement & European **Executive Partner Members** in Europe, CLIA

ner Members in Europe.

4 June 2015, 10.15, Hall G, CCH Statement 4 June 2015, 10.25, Hall G, CCH Discussion







IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE 41

# Speakers



**Roberto Perocchio** 

Managing Director of Venezia Terminal Passeggeri S.p.A.

After obtaining his legal degree, Roberto Perocchio became a member of the executive council of the Italian Marine Industry Association (1990 - 2008). In 2009 he was appointed chairman of ICOMIA Marinas Group (International Council of Marine Industries Associations). From 2010 to 2011 he held the position of director EU relations/Adriatic Sea at MEDCRUISE. In 2011 he became a member of the board of directors of Catania Cruise Terminal S.r.l. He has served as national vice president of Federturismo Confindustria since 2013.

4 June 2015, 09.55, Hall G, CCH Statement 4 June 2015, 10,25, Hall G, CCH Discussion



**Alexander Porschke** 

President of NABU Hamburg (Nature and Biodiversity Conservation Union)

Alexander Porschke has served as President of the NABU (Nature and Biodiversity Conservation Union) office in Hamburg since 2010. NABU is one of Germany's biggest environmental NGOs (500 000 members). From 1997 to 2001 Alexander was Hamburg's minister for the environment and from 2004 to 2007 he worked as a freelance consultant and trainer in South America (Peru, Ecuador and Guatemala) for a variety of international organisations.

4 June 2015, 11.40, Hall G, CCH Overview 4 June 2015, 12.40, Hall G, CCH Discussion



Jörg Pollmann

Harbour Master of the Port of Hamburg

Captain Jörg Pollmann holds an overseas master mariner's licence and a diploma in nautical science. He spent 12 years at sea on board general cargo and container ships and has extensive experience in port and terminal management. In 1994 Jörg joined the Hamburg Port Authority and was appointed Harbour Master.

2 June 2015, 16.00, Hall G, CCH

2 June 2015, 16,20, Hall G. CCH

Port AB

After completing his business and so-

ciology studies at the University of Lund

in 1990, Johan Röstin worked at ACE Air

Cargo Express. He was a branch manager

at Air Express International in Gothenburg

from 1995 to 1998 and switched to SAS

Cargo Sweden where he was made sales

director for Scandinavia in 2004. From 2004 to 2009 Johan worked for Schenker. He

assumed the role of CEO of Copenhagen

Malmö Port AB in 2009. Johan is the vice

chairman of the Swedish Ports Association

and board of director at TransportGruppen.

4 June 2015, 12.10, Hall G, CCH

4 June 2015, 12.40, Hall G, CCH

Statement

Discussion

Johan Röstin

CEO of Copenhagen Malmö

Statement

Discussion



**Dr Maria Carolina** Romero

Associate Professor at the World Maritime University in Sweden

Dr Maria Carolina Romero Lares has been involved in the maritime sector for over 15 years. For her doctoral dissertation titled "Liability for Oil Pollution Damage from Tanker Accidents", originally written in German at the Leibniz University of Hanover, she was awarded a cum laude. She was the first woman to direct the International Office of the Venezuelan Maritime Administration and the first one promoted to associate professor at WMU. As an advocate for women's rights in the maritime and port sectors, she has publications on the topic.

4 June 2015, 11.40, Hall B, CCH



**Olaf Scholz** 

First Mayor of the City of Hamburg

1 June 2015, 19.00, Hamburg City Hall Welcome Reception

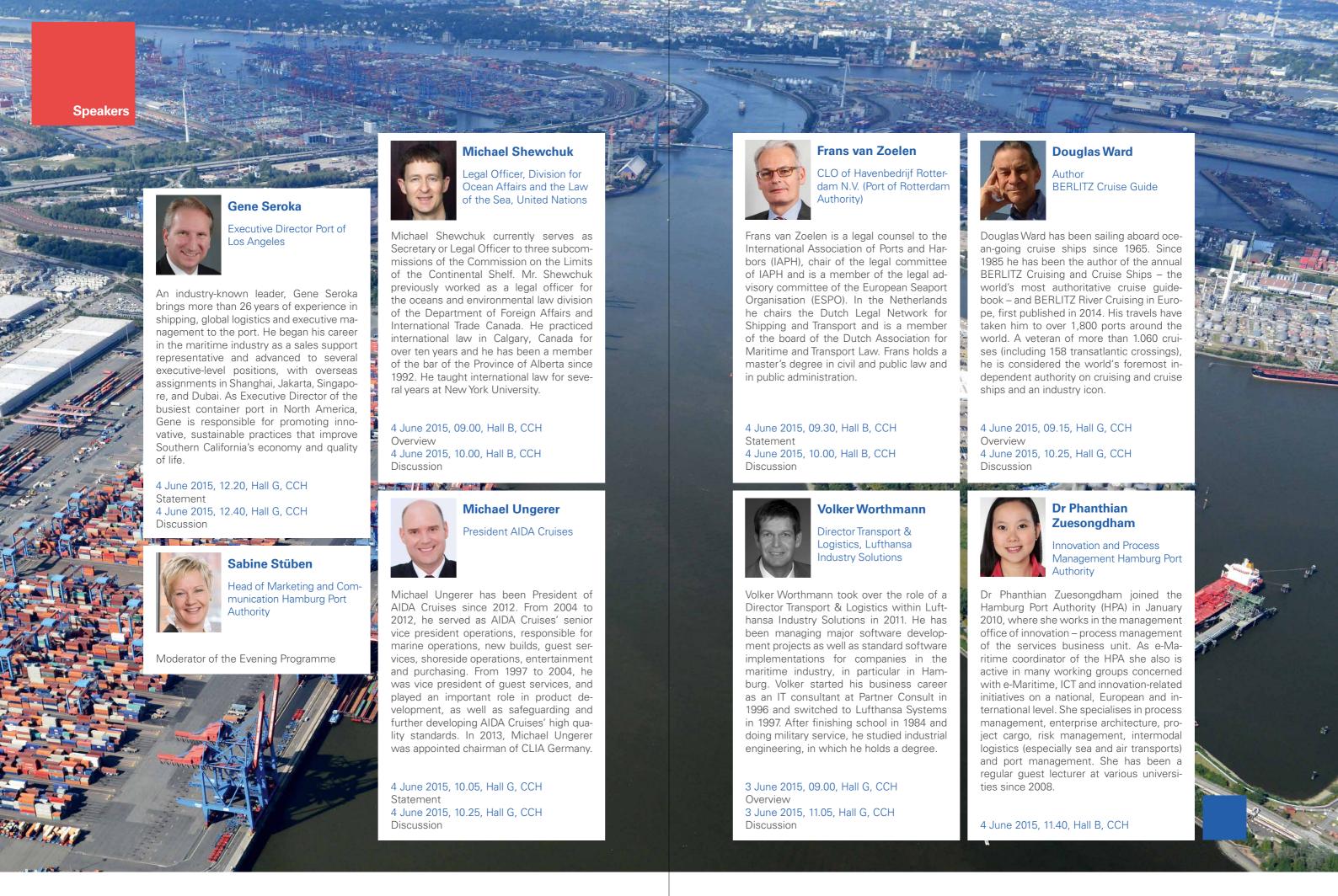


**Gun Rudeberg** 

Legal Counsel and Head of **Environmental Affairs at Ports** of Stockholm

Gun Rudeberg joined Ports of Stockholm in 1995 and is a member of the management board. Gun has been a member of the European Sea Ports Organisation's Sustainable Development Committee since July 2000. From 2009 to 2014 she was the chair of the committee. She has been a member and served as chair of the Swedish Ports Environmental Committee since July 1995. Gun holds a master of law from the University of Lund, Sweden.

3 June 2015, 14.25, Hall G, CCH Statement 3 June 2015, 15.00, Hall G, CCH



IAPHHAMBURG2015 29th WORLD PORTS CONFERENCE City of Hamburg – Calling at the smartPORT 45



# Daily News



2. June 2015 | No 1

www.thb.info/iaph



www.dvvmedia.com



Reception in the Hamburg City Hall for the 29<sup>th</sup> IAPH: Mayor Olaf Scholz speaks to port directors and logistics experts

# Scholz opens smart IAPH

Mayor receives 700 delegates at the World Ports Conference in Hamburg's City Hall

The 29th IAPH World Ports Conference (International Association of Ports and Harbours) flies the flag again in Hamburg. The major international event is held every two years. With head office in Tokyo, the IAPH represents 180 ports and 140 related business sectors in 90 countries.

"Hamburg Port simply must keep up with

the tidal waves of change and remain one of the most important hubs of trade in Europe," remarked mayor Olaf Scholz (SPD) at the reception on Monday, adding, "We're Germany's biggest port, one of the leaders in Europe and determined to stay at the top." He is convinced that plans to deepen the navigation channels in the River Elbe will successfully go ahead.

It is the second time that the metropolis on the Elbe has been honoured by the IAPH to host the World Conference a • er 1985. Approximately 700 delegates accepted the mayor's invitation to the reception in the city hall.

• e Hanseatic city with its population of 1.8 million is one of the biggest industrial centres in Europe. Aside from the →

ADVERTISING



ports of vlissingen and terneuzen www.zeelandseaports.com

driven by dedication



#### **CONTENTS**

Focus and Service 2-3
Three Questions to BSH President Monika Breuch-Moritz 4
How HPA Chairman Jens Meier sees the port future . 5
Impressions 6–7
Luxury liners: How Hamburg profits
Hummel supplies onshore power
IT partner for port management and logistics 10
Map & Highlights

strong in •ufrom page 1  $\rightarrow$ ence of the maritime industry, the city has a very large aviation sector. "We want to o • er scope for technical innovation, constantly asking ourselves how we can do things be • er," proclaimed Scholz. "Tradition will not carry us further unless we accept the challenge of evolution and get real, meaning smart. And just as we had to cope with the disruption caused by the advent of container shipping long ago, so

we are now using digital techniques which are playing an increasing role in Smart Port logistics".

"We want to show our guests innovative and tangible projects," commented Jens Meier, Chairman of the Hamburg Port Authority (HPA) and host of the summit for the maritime economy. "• at makes more of an impression than presenting charts and glossy brochures." Moreover, Hamburg is ready and equipped to cope with large size container ships with over 19 000 TEU.

- e IAPH Conference began prior to the Senate reception with internal commi•ee meetings. At the same time top female representatives from major international seaports got together for a working lunch (see Impressions on page 6/7).
- e 29th World Ports Conference o• cially opens today in the CCH. Present at the festive ceremony were Grant Gil•llan, IAPH President & Chief Executive O• cer/Director, Port Authority of New South Wales, Australia, Hamburg's Business Senator Frank Horch and Enak Ferlemann, Parlamentary State Secretary at the Federal Ministry for Transport.



IAPH President Grant Gilfillian and Jens Meier, Chairman of the HPA Management Board, left and right of Olaf Scholz PHOTOS: HINRICH FRANCK

Focus topics at the conference cover the e• cient and frugal usage of resources, land and energy, with legal questions also an issue, along with the development of world trade, cruise shipping and air pollution.

Further contributions include the organisation of freight transport, management of goods •ows, energy consumption and the optimisation of resources. An important tool in all this is played by information technology and its role in recording and coordinatingmovements of ships, trucks, trains, containers and other environmental in • uences.

• e representatives of ports throughout the world are gathering at a time when world trade seems to be at a point of decline. On the other hand, however, larger ships are increasing demands on logistics and transport e• ciency. • e answer to this challenge is a further digitization of services, re•ected in this year's mo•o: "City of Hamburg - Calling at the smartPORT".



# The History of Seafaring

The Maritime Museum in the Hafencity

The historic Kaispeicher B, address Koreastraße 1, is home to the world's largest private collection of maritime treasures. It is the location of the Maritime Dinner for IAPH guests to be held on 2<sup>nd</sup> June.

The exhibition in the Hafencity International Maritime Musuem, opened in 2007, depicts 3000 years' seafaring history on nine decks. Museum benefactor and founder Prof. Peter Tamm displays his collection on an area measuring more than 11 000 square metres. Over decades the former media manager collected 26 000 ships' models, 50 000 construction plans, 5000 paintings and graphics, more than 2000 films, 1.5 million photographs, 120 000 books, nautical equipment, appliances and historical uniforms.

#### **IMPRINT**

#### **IAPH Daily News**

is published daily during 29th World Ports Conference 2015 by DVV Media Group GmbH

**Editors** Frank Binder (resp.) Claudia Behrend, Tim-Oliver Frische, Melanie Graf, Sebastian Reimann, Ariane Wagner

**Translator** Michael T. Roberts

**Design** Andreas Gothsch

#### **Advertisements**

Tillmann Kummer +49-40-23714-0

PHOTO: WIKIPEDIA/MBDORTMUND

**Distribution** Markus Kukuk

**Print** Albert Bauer Companies

#### Copyright 2015

DVV Media Group GmbH

# Conference Information App

The Hamburg Port Authority (HPA) has developed an app offering extra benefits to conference participants.

According to the HPA, the IAPH Conference App 2015 makes a host of features available to guests, such as conference program synchronisation with electronic calendar and voting tool. Guests must register to be able to use all app features.

• e o• cial IAPH App 2015 can be downloaded from the App-Store (iOS), Google Play Store (Android) or the website www.iaph2015.org as web app. Search string: IAPH 2015.

#### 1. Program

Overview of session schedules with details, speaker bios and presentations in an intuitive and easy-to-use agenda with legend.

Events can be added to fa-

vorites and phone/tablet calendar to make sure nothing is missed.

Dates and locations updated in real time. You are kept up-todate on changes with push noti • cations sent to your device, even if you're not currently using the app.

#### 2. Live polls and discussions

Answer questions asked by the speaker, ask the speaker a question or comment on one using your phone/tablet. At the event latest poll results are shown live on screens during

#### 3. Private Messaging

• is function helps set up meetings quickly. • ey can be arranged using secure in-app private messages.

People with relevant skills or who represent companies of interest are visible in the app.

To use the Chat function sign



up using your LinkedIn account or •ll in your pro•le manually. Email signup or staying without logging in are also possible (no chat function available).



Download

Plus option to save other attendees' contact details in your device address book.

#### 4. Feedback

• e Feedback feature gives the organizer a direct event evaluation. Please take a minute to rate and answer Feedback questions.

#### 5. PDF Presentations

A • er the conference sessions, PDF presentations will be available in the app for easy access and personal comfort.

#### Preferred HPA-Candidate

Max Boodie moderates the 29th IAPH World Ports Conference

Attendees of the World Ports Conference in Hamburg can look forward to more than just an interesting conference programme of the highest calibre.

For the •ve conference days the host, the Hamburg Port Authority (HPA), has compiled a programme of events that is as comprehensive as it is entertaining: moderator Max Boodie will make sure that delegates will have an informative week at the Congress Center Hamburg (CCH). • e Dutch national did an excellent job when he

moderated the "2013 International Association of Ports and Harbors (IAPH) Africa/ Europe Regional Meeting" in Amsterdam. It will not all be work at the conference, though: the HPA will also provide its international guests the opportunity to experience their host city. • e 29th IAPH **World Ports Conference takes** place in Hamburg from 1 - 5 June 2015.

Max Boodie is the HPA's preferred candidate for the role of conference moderator: Book author, entrepreneur, consultant, supply specialist - the charismatic



Dutch national with roots in Surinam is multi-talented and active in a wide range of fields.

Over the course of his 25-year career as a consultant, company founder and investor in various technology-driven companies he became particularly interested in methods to efficiently deploy and promote the development of people: "A genuine interest in people has always been a central part of my career. I want to know what moves and excites them and what their 'call to action' is," explains Boodie. This explains the continuous efforts of the 50-year-old to interlink people and help them to establish new, successful connections.

THREE QUESTIONS TO



#### Monika Breuch-Moritz

President of the Federal Office for Maritime Shipping and Hydrography (BSH)

What expectations do you have of IAPH?

It is a high-ranking meeting if you regard the speakers as well as the participants. Therefore I hope that I can learn what is relevant for the ports at the moment. Ocean vessels call at ports worldwide. Despite this the national legislations of port states set di•erent frameworks for the crew of the vessels. Therefore it would be highly desirable if IAPH as a worldwide association could drive harmonization, for example, of (security) standards relating to LNG bunkering, shore-side power supply or waste management.

What is your most important topic?

Environmental protection is one of today's dominant topics, both on and o• shore. Ports are the interface where the national legislation on environmental and climate protection meet the international shipping regulations. In my presentation I am going to highlight the activities aimed at reducing air pollution caused by ocean vessels. • ese activities are very valuable for the ports if they are e•ectively implemented and controlled. • is is especially true for the port of Hamburg

as its location close to the city centre calls for a harmonized cooperation of di•erent users. In the Elbe river at the entrance of the port of Hamburg our examination of exhaust gas plumes of the vessels shows that nearly all vessels comply with the new regulations on sulphur content in fuel.

Which objectives did you set yourself for the future?

I would like to further promote one topic that has been important for me for some time - and which is in the best interest of the maritime sector: protecting the environment in maritime transport. Ships as a means of transport are very eco-friendly and industry has already proven that mandatory regulations lead to progress and the development of innovative solutions. With the ongoing successful collaboration between the economic and environmental sector there is even more room for improvement. Ports do have all the necessary instruments to maximise marine protection. Infrastructure for alternative bunkering and on-shore supply is today's key topic when we talk about smartPort energy.

Talking about ports: • e intensive collaboration between public authorities, ship owners and other port facilities and enterprises is essential. BSH has its focus on the marine industry since we understand ourselves as a partner to the maritime and shipping industry.

Talking about BSH: Currently we are undergoing the tendering process for a new survey ship. Main criteria will be energy e• ciency and environmental performance. We need to step ahead and show that cost and environmental e• ciency are two sides of the same coin.



#### Red Sofa Discussions

It's talk time again on the Red Sofa, the cult furniture item kindly provided by the DVV Media Group (DVV) for interviews with key personalities at the 29th International Association of Ports and Harbours (IAPH) from 2 - 4. June. Amongst the illustrious guests, of course, will be none other than Jens Meier, acting "host" of this year's conference and Chairman of the Hamburg Port Authority/HPA.

"City of Hamburg – Calling at the smartPORT" is this year's IAPH Conference mo•o, Hamburg holding this

major global get-together of big names and important players in the port and maritime industry now for the second time since 1985.

Bernd Appel, Managing Director of the Lu•hansa subsidiary Lu•hansa Industry Solutions will also take his place on the Red Sofa to submit his views on the increasing complexity of logistic processes in the maritime industry. His claim: "In future, growing demands for e• ciency, economy, safety and ecology can only be met by smart ports," seems a most appropriate subject at IAPH 2015.



The DVV Media Group, media partner to the IAPH World Ports Conference, has prepared a landing page.

• e area is accessible to all users and can be opened via short-cut www.thb.info/iaph on mobile end devices. • e IAPH app is also available from the AppleAppStore under IAPH 2015.

# "Smartport means more than reporting bottlenecks"

How HPA Chairman Jens Meier sees the port future

Anyone entering the Hamburg Port Authority's central administration building in Hamburg's old warehouse district will find on the left a giant-sized tablet computer. Shown on its display is nothing less than the future of the port. A click and a young man named Daniel gives a rundown on growth prospects for the port until the year 2025.

A further click and 'Günter' explains in a video about plans to position Europe's third biggest sea freight hub as a quality port. • e problem, however, is that the port's infrastructure is already bursting at the seams. More e • ciency is called for and best achieved through higher IT networking and improved usage of available data. • e requirement to become "Smart" has led to the "Smart Port" initiative now under way in the Port of Hamburg. Already, sensors count vehicles on port roads and large displays show where bo • lenecks arise. An app even helps truck drivers •nd the nearest parking area. Other measures include a tra • c management system to coordinate road and rail movements.

Similar concepts are being implemented in other North Range ports. At the World Port Conference the HPA intends to announce next steps on the way to become an "intelligent port". Asked speci • cally what these are, Jens Meier would give nothing away other than: "Smartport means more than reporting bo • lenecks."

In Meier's world, the keyword is "• e Internet of Everything. We must link tra • c informa-

tion for all means of transport to cargo handling information". • en the next step is, "to break port limitations," which the port manager explains by means of an example: "For a chemical company on the Rhine, whose export business requires detailing hazardous materials, the worst thing is to discover that a declaration is faulty or incomplete shortly before arrival in port." Direct action with the relevant o • ces then makes sense, "to ensure that customs clearance and terminal bookings are already seen to when the goods arrive". Today solutions are available or being developed by way of an import and export message platform. "• e decisive point," continues Meier, "is not to begin by asking the question about who should have access to data, but to agree on a model that guarantees e • cient data processing." Meier is well aware of objections on grounds on data security, but sees security primarily in having reliable systems, that is, " • rst they must be available, second there must be controlled access to data. Because it has less to do with sensitive data and more with data to help optimise tra • c •ows, such as departure times - so obviously not really of a sensitive nature." Questioning arguments based on data security, he assumes it has more to do with the fear of competitors learning something they

To clarify, Meier cites another example from the aviation industry: Airline representatives convened at Zurich airport to come up with a solution to minimise airport delays, even-



PHOTO: PATRICK LUX

tually deducing that if a •ight was behind schedule it would make sense to transfer the slot to another plane, even if from a di • erent airline. Although an airline would stand out if it had many delays in one week, Meier explains that this is less relevant than focusing on the collective e • ort. If these obstacles could be overcome and "fertile ground created for innovative ideas", then completely new business models may emerge. Meier gives a further example to explain what he means, this time from the cruise sector: When on the day of departure thousands of cruise ship passengers arrive at Hamburg railway station, their luggage needs transporting to the terminal. But where can the trucks

carrying the luggage park when all spaces are occupied by buses full of passengers? Meier's solution: "If passengers submi•ed their smartphone data, service providers could ensure that passengers get to the ship with their luggage comfortably and conveniently. For example, they could have their luggage picked up from home 2 days earlier or be sent a restaurant recommendation."

#### **Analyse current procedures**

Meier sees such value added services and e • ciency gains possible also in freight transport. "We are already on the way, but need to thoroughly examine existing business models". And that is also what the Smartport concept is all about.



Impressions Women's Forum Working Lunch



Still underrepresented in the maritime industry, the IAPH Women's Forum, held since 2012, aims at enhancing and empowering women. In the Mariott Hotel 25 women from the maritime world gathered yesterday for a Working Lunch. After a short opening speech by Chairperson Naomi Kogon-Steinberg (USA) IAPH President Grant Gilfillan (Australia) welcomed the participants: "The way women are treated is still different. There is always a price to pay, but the price women pay is higher than the one men pay." Following his speech the forum's four iniatives were presented. Dr. Geraldine Knatz (USA) introduced the two planned scholarship programs: the biennial training scholarship for maritime related academic studies and trainings, and the annual meeting scholarship, which enables women to take part in IAPH conferences.

Justine Camoin (France) reported on the work on website development and the forum's social media activities.

Melissa Kappely (New Zealand) and Rachel Vandenberg (Canada) presented the mentoring program, aiming to support the advancement and empowerment of women within IAPH.

The fourth initiative of an exchange program between ports was presented by Siti Noraishah Azizan from Malaysia. The objective is to provide opportunities for women to broaden their horizon and improve intercultural skills.







IAPH President Grant Gilfillan (Australia) welcomed guests at the Women's Forum Working Lunch.



from left: Gisha Rizky
Prathita: "Women have
a different perspective"
and Ima Andari Utami
(both from Indonesia):
"It's good to share information in an industry
that is mostly dominated
by men"



"The Women's Forum offers an excellent possibility to exchange with women in a male-dominated business environment."



Heike Naumann (Germany): "The port economy is still dominated by men. Women should become more visible, articulate themselves more strongly and voice their opinions."





PHOTO: AIDA CRUISES

# Luxury liners: How Hamburg profits

More than 270 million Euro added value – Cruise business continues to grow

Environment increasingly important

Not only is the "Queen Mary 2" a majestic sight when sailing into the Port of Hamburg. For the public on the banks of the River Elbe, each of the almost 200 annual giant cruise ship arrivals is an impressive spectacle. Also impressive is the amount of money the business generates for the city of Hamburg.

According to a survey by the Hamburg Chamber of Commerce, every year the cruise business creates additional revenue of over 270 million Euro for the Hanseatic state city, a sum far greater than that accruing from tourist expenditure.

Hamburg is banking on the trend to holidays on board ship being here to stay. 189 arrivals registered by the Cruise Centre in 2014 are twice that of •ve years ago. In the same period passenger numbers have more than quadrupled: 588 690 cruise ship passengers visited Hamburg last year compared with 127 000 in 2009. Whilst fewer cruiser tourists (525 000) and ships (161) are expected in 2015, this is due to various factors, such as adaptation to new emission guidelines or a shi • of capacities to Asia.

In the long run the growth trend is expected to continue, a signi•cant contribution

to be made by the "AIDAprima" alone, which from spring 2016 will be bringing around 4000 passengers to her home port. Further grounds for optimism are provided by the port of Hamburg again receiving the "Best Turn¬around Port Operations" award from the magazine "Cruise Insight" earlier this year and healthy order books in the construction yards. • e prognosis for Hamburg and the 1500 jobs dependent on the industry indeed looks positive.

To give an insight into the complex system of income added by the cruise industry in Hamburg, we can take the example of the "Queen Mary 2" entering the port area. With a li•le luck, from the banks of the Elbe the pilot boat might be seen pulling up alongside the giant as it makes its way down the river and the two pilots required for a vessel this size climbing aboard to navigate the liner safely to its berth. In the meantime the Cruiser Terminal is well prepared for the arrival of the 2600 passengers, alongside approximately 100 workers from up to 30 companies to make sure all operations run smoothly: from linesmen, river police and forkli • truck drivers on the quay to customs o • cials, shu • le service personnel and cleaning teams. All these are components in the process chain for cruiser shipping in the Port of Hamburg, which counts around 400 companies and 1500 employees in total. Investment of 64 million Euro in a third cruiser terminal in Steinwerder, where the •rst passengers will be checking in and out of their ships this summer, is testimony to the city's con•dence in the future.

Local politicians and investors plainly expect the cruise sector to be a continued money-spinner for the city. 25 million Euro we see generated above as added value just for the arrival procedure. On top of this come further wages in the port, processing fees, as well as fuel and waste disposal charges.

E•ects of the cruise ship boom are also evident beyond the ships' berths. Around 21 million Euro is spent by passengers and crew during their stay in Hamburg restaurants, shops, and also in hotels, if they stay in the city overnight before or a•er their cruise.

Aside from passengers and crew, cruise ships arriving in Hamburg also a • ract day tourists, especially for ships' naming ceremonies and events like Cruise Days or the port anniversary celebrations in May. Industry events such as the biennial Seatrade fair, with its 4000 visitors, the biggest of its

kind, also bring business tourists to the "Hansestadt". • e Chamber of Commerce calculates a value added sum of 32 million Euro arising from people only.

On top of the 400 companies in Hamburg involved in the cruise business come shipyards, ships' suppliers and construction •rms working on terminals and infrastructure, in addition to service companies, such as wholesalers, so • ware producers, shipping lines, certi•ers and consultants, which are responsible for the lion's share of added value, namely 192 million Euro. Today this •gure could even be bigger since the Chamber of Commerce based its calculation in the 2013 survey on only 200 companies.

· e Port of Hamburg is constantly working on expanding and improving services for ships. Here, ecology plays a big role. For example, ships in future will be required to switch o • their auxiliary diesel engines when at berth. Consequently, as of this season the company Becker Marine Systems will for the •rst time be providing energy to cruise liners berthed in the port from its "Hummel" LNG hybrid barge. Unlike conventional diesel engines, the •oating liquid natural gas power generator, developed in cooperation with the AIDA cruise line, emits no sulphur dioxide or •ne dust particles, whilst reducing nitrogen oxides by 80 per cent and carbon dioxide by 30 per cent. • e Port of Hamburg is the •rst in Europe to



#### Hummel supplies onshore power

World premiere in Hamburg: Following trials lasting several months, since 30th May a floating LNG power station now supplies cruise ships in the AIDA fleet with electricity when at berth in the port. The barge named "Hummel" - a vessel without engines of its own - supplies the first environment-friendly energy from liquified natural gas (LNG) to the liner "AIDAsol" at the Cruiser Terminal. "It is an important step to an even greener port", says Hamburg Environment Senator Jens Kerstan (Green Party).

Some cruise ships consume as much power as a small town when at berth. LNG power generators represent a possibility, after onshore power, to significantly reduce vessel emissions when at rest in the port. LNG electricity generators emit no sulphur oxides or fine dust particles, nitrogen oxide emissions are reduced by 80 per cent and those of carbon dioxide by 30 per cent.

The barge was launched in September 2014 in Slovakia. With its five gas motors it can provide 7.5 megawatts - as much as two wind power generators on land. The LNG is imported from the Netherlands. PHOTO: BECKER MARINE

o • er environment-friendly electricity to cruise liners in this form and in the second half of the year ships at the Altona cruiser terminal will be supplied energy by the •rst stationary shore-based power generator. • is clearly illustrates how value added production by companies and that relating to the arrival of ships are intertwined.

If the cruise business continues to develop so positively, the city can look forward to large value added rewards in future. Moreover, when admiring views of the huge ships as they enter the port, the population of Hamburg can rest assured that their contribution to the city goes far beyond offering an attractive spectacle.



IT partner for port management and logistics

Lufthansa Industry Solutions at the IAPH 2015



Intelligently controlled with digital technologies: The maritime sector PHOTOS: LUFTHANSA

Lufthansa Industry Solutions wholly-owned subsidiary of German airline Lufthansa AG, will be at the World Port Conference IAPH 2015 showing how the increasingly complex processes in the maritime sector can be intelligently controlled with the help of new digital technologies.

One of the projects from its innovation laboratory the IT service provider will be presenting at its stand will be a recently developed pilot system to make pier planning more e • cient. It improves predictions of delays and supports decision-making for pier planning. "We see ourselves as an IT partner for port management and logistics, and can look back on a large number of successful projects in this sector," explains Bernd Appel, Managing Director of Lu•hansa Industry Solutions (see him tomorrow on the Red Sofa, 02:00 pm, CCH, 2nd •oor, stand no. 22).

#### Familiar with port management processes

From consulting to completion, Lu • hansa Industry Solutions o ers all IT services for port authorities, port operators and logistics companies from a one-stop service provider. Apart from developing and operating the IT systems of the Lu•hansa freight business (Lu•hansa Cargo), the customers of this Lu•hansa subsidiary also include the international carrier Panalpina, the Hamburg Süd shipyard and the Hamburg Port Authority (HPA).

Moreover, the company will be enhancing the conference program with a lecture on digitizing port logistics entitled "IT is ready for smart solutions" presented by Volker Worthmann, Director of Transport and Logistics (9:00-9:20 am on June 3rd). • ere is hardly any other place where the various actors in logistics meet at such close quarters as in a major port. Maritime shipping, rail and road must be linked in a logistics hub that is as e • cient as possible if the port is to withstand competition from other locations. "It is obvious that such a complex operation cannot begin to be accomplished without high-performance IT systems. In the future, only smart ports will be able to meet the growing demands for e • ciency, economy, safety and environmental compatibility," says Bernd Appel. • is is also underscored by the mo•o of the IAPH 2015: "City of

Bernd Appel, Managing Director Lufthansa **Industry Solutions** 

Hamburg - Calling at the smartPORT". Lu•hansa Industry Solutions, based in Norderstedt near Hamburg and with branch o• ces in Germany, Switzerland and the USA, develops and implements customized IT solutions to its customers' needs. • e roughly 1,000 employees o • er strategy and consulting, as well as design, conception and application management. • us Lu•hansa Industry Solutions covers the entire spectrum of IT services.

#### From a business unit to an independent enterprise

Since 1st April 2015, the former Industry Solutions business unit of Lu•hansa Systems AG has been doing business as an independent company. Under the name of Lu•hansa Industry Solutions, this full-service provider of IT services has been aligning itself even more scrupulously to the needs of the market. ". e digitization of business is opening up great potential for new value-added models and more growth to our customers in many industries. We help companies exploit this potential by optimizing production and work processes," explains Managing Director Bernd Appel. As a business unit of Lu•hansa Systems AG, Industry Solutions has already been deeply integrated into the IT processes of non-•ying group companies. At present, the customer base of Lu•hansa Industry Solutions comprises a total of around 150 companies in various industries, ranging from SMEs to corporations listed on the DAX. • ese include, for instance, companies from the automotive, energy, manufacturing, healthcare, transport and logistics sectors, as well as media and publishing companies.



Bigger Vessels – Bigger Challenges

09.30 - 11.15 **Opening Ceremony** 

Welcome to the 29th IAPH World Ports Conference Hall G, CCH

11.15 - 11.45 Keynote

> The Digital Transformation of Business and Society and its Impact on the Shipping, Ports and Maritime Industries by 2030 Gerd Leonhard, CEO The Futures Agency Foyer, CCH

The Importance of smartPORTs in Global 13.30 - 14.00 Competition - Challenges and Solutions

> Marco Lippuner, Siemens AG, Hall G, CCH

What are the Threats and Opportunities for 14.00 - 14.30 **International Shipping in the Future?** 

> Peter Hinchliffe OBE, Secretary General ICS Hall G, CCH

The Evolution of Containership Sizes and its 15.20 - 15.40 Impact on the Industry

Jost Bergmann, DNV GL

Hall G, CCH

Mega-Ships: Still for the Common Good? 15.40 - 15.50

Olaf Merk, ITF Hall G, CCH

**Future Prospects: What will be the Impacts** 16.20 - 17.05 of Ship Size Development?

> Discussion with Dr. Christian Growitsch, Jost Bergmann, Olaf Merk, Capt. Salvatore Cafiero, Jörg Pollmann, Benjamin Lai, Max Boodie

Hall G, CCH

**Maritime Dinner** 18.30

International Maritime Museum



Dirk Lehmann, Managing Director, Becker Marine Systems Frank Schnabel, Managing Director, Brunsbüttel Ports Jost Bergmann, Business Director Container Ships, DNV GL Knut Fleckenstein, Member of the European Parliament



#### Welcome to the World Ports Conference!

From June 1st to 5th, the Port of Hamburg is where the world gathers. As the host of the **29th IAPH World Ports Conference** we are delighted to welcome you to the maritime summit to discuss highly topical issues on the basis of a trade-off between economic and environmental benefits.

What can we do to make our ports more efficient? How can we achieve environmental goals? What makes Hamburg a **smartPORT**? Let Hamburg inspire you - look forward to an exciting conference programme featuring top-notch speakers and fabulous social events.

We wish you an enjoyable conference week!

City of Hamburg - Calling at the smartPORT





# Daily News

Lufthansa Industry Solutions

Your future is digital.

3. June 2015 | No 2

www.thb.info/iaph



www.dvvmedia.com



The scene for this opening event was set by a spectacular stage show with special views in the future of ports and maritime logistics

# Conference starts with record

OECD warns of larger vessels – Over 900 guests discuss intelligent port schemes

The economic benefits of huge container ships are smaller than expected. Many savings on the one side simply end up as costs on the other, according to a study by the Organisation for Economic Co-operation and Development (OECD), which was presented at the World Ports Conference in Hamburg on Tuesday.

"We are ge • ing close to the point where larger ships no longer make sense," claims Olaf Merk, expert for ports and ships and author of the OECD study. "In fact, we may already have crossed this point." Over 900 international representatives from the worlds of business, politics and science as well as over 60 press representatives have gathered in the Hanseatic City for the •ve-day conference.

Olaf Scholz, Hamburg's First Mayor gave a preliminary starting signal during a Senate reception at the Hamburg City Hall on Monday. A Welcome Dinner held at the Hamburg Chamber of Commerce in the adjacent New Stock Exchange then enabled delegates to warm up and get in the mood for the conference week ahead.

• e o • cial opening of the 29th IAPH →

ADVERTISING



### **CONTENTS**

Focus: Offical opening . 1–2
HHLA orders new container gantry cranes
Discussion Bigger Vessels - Bigger Challenges 4
What's the limit for Mega Boxers?
Impressions 6–7
Europe's ports invest in further growth
Pioneering technology 10
Man & Highlights 11

*from page 1* → World Ports Conference in the Congress Center Hamburg (CCH) took place yesterday. Grant Gilfillan, IAPH President & Chief Executive Officer/Director of the Port Authority of New South Wales, Australia, ceremonially opened the conference. Welcome speeches followed from Enak Ferlemann, Parliamentary State Secretary at the Federal Ministry of Transport, Building and Urban Development, Frank Horch, Hamburg's Senator for Economics and Jens Meier, Chairman of the Management Board Hamburg Port Authority (HPA).



Yesterday evening's Maritime Dinner for conference guests at the International Maritime Museum in the HafenCity PHOTO: H. FRANCK



### Bali Night in Beach Club

Getting in the mood for the 30th World Ports Conference

Today the Indonesia Port Corporation invites you to "Bali Night" in the event location run by Beach Hamburg GmbH. With heated sand under foot, fruity cocktails and exotic beats, guests at the Hamburg World Ports Conference will be given an atmospheric taste of what's to come at the 30th IAPH World Ports Conference in Denpasar, Bali in 2017.

Roughly 15 minutes from the city centre, address Alten Teichweg 220, two large halls with bar area and white sand offer 2300 square metres for creative ideas and relaxing, cordial hours in the beach lounge. Outside a spacious area with large beach, lawns and open air swimming pool awaits visitors.

### **IMPRINT**

### **IAPH Daily News**

is published daily during 29th World Ports Conference 2015 by DVV Media Group GmbH

**Editors** Frank Binder (resp.) Claudia Behrend, Tim-Oliver Frische, Kerstin Kloss, Jan Naumann, Sebastian Reimann, Ariane Wagner

**Translator** Michael T. Roberts

**Design** Andreas Gothsch

### **Advertisements**

Tillmann Kummer +49-40-23714-0

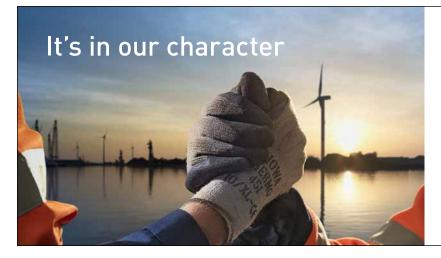
**Distribution** Markus Kukuk

**Print** Albert Bauer Companies

Copyright 2015

HOTO: DVV Media Group GmbH

ADVERTISING



ports of vlissingen and terneuzen www.zeelandseaports.com

driven by dedication



## Large Cranes for Large Vessels

The CTB expands its capacities for the latest generation of mega-ships

Hamburger Hafen und Logistik AG (HHLA) yesterday announced its order for three new container gantry cranes for the Burchardkai Container Terminal (CTB).

• ese state-of-the-art cranes make it possible to handle ships with a capacity of 20,000 standard containers (TEU). • eCTB is thereby expanding its capacities to accommodate the latest generation of mega ships. Chinese manufacturer ZPMC will be the supplier of the cranes. Dr. Stefan Behn, member of the HHLA Executive Board, pointed out the signi • cance of the investment: "• e number of ultra large vessels calling at our Hamburg terminals is growing all the time. • e new cranes provide us with additional capacity and •exibility, allowing us to continue handling vessels with the high level of productivity that our customers are accustomed



The HHLA has ordered three new container gantry cranes for the Burchardkai Terminal PHOTO: HHLA

to. Purchase of the cranes is part of our long-term programme to adapt to ship sizes and increase productivity. At the same time we are implementing measures to ensure a more e• cient coordination of tra• c both at the quayside and in the hinterland."

• e new container gantry cranes will be positioned at berth 5/6 and are designed for container ships with 24 transverse container rows. • anks to their 74-metre jibs, they are appropriately equipped to handle 20,000 TEU ships.

• e new cranes can also operate in tandem mode. With one li• they can move two 40-foot containers or four 20-foot containers. Each container gantry crane weighs 2,400• tonnes and has a maximum payload of 110 tonnes.

# THE RED SOFA

## Accomplished IAPH Premiere

Discussion on LNG and large container ships

LNG in large container shipping? "Sure, that's certainly going through a lot of people's minds," said Dirk Lehmann, Managing Director of Becker Marine Systems, the •rst interview guest on the Red Sofa. "Of the 19 orders for long-distance container ships with LNG propulsion built by Hyundai for United Arab Shipping Company (UASC), the 14000 TEUs are already in service and one 19600 TEU ship has been christened and due for delivery shortly. • at's precisely

the push LNG needs."

Frank Schnabel (pictured right), Managing Director of Brunsbü•el Ports, sees LNG as a strategic issue. Brunsbü•el has the biggest interconnected industrial area in the state of Schleswig-Holstein. In the so-called ChemCoast Park established companies dependent on gas, such as Yara, Sasol and others, will have greater needs in the future. "LNG could be an interesting alternative to pipeline gas for these companies."



Jost Bergmann, Business Director at DNV GL, announced that 24000 TEU giants are technically possible today.
• ese can even be built on the basic 19000 TEU ship structure. "19100s are already sailing the world's oceans, 20500•TEU ships are the largest class of ships you will •nd in the order books and some of our researchers believe that it's simply a ma•er of time before we have 30000•TEU.

## More collaboration needed

Shipping lines need to talk to ports about infrastructures for ULCVs



Panel discussion on container ship growth

Container ships are the workhorses of globalisation. The biggest ones at the moment have a capacity of over 19,000 TEU. Orders have already been placed for vessels with more than 21,000 TEU capacity, so-called ultra large container vessels (ULCVs) and will enter service in 2017. Drivers of this development are the large international shipping lines who hope that economies of scale for bigger ships will bring significant savings for each con-

But how do these mega boxers impact

tainer transported.

other players in the logistics chain? Are the shipping lines the only party that reaps the rewards, whilst terminal operators face more costs in providing higher gantry cranes, stronger quay walls and larger container terminals? Will it be le • to the taxpayer to foot the bill for new expansion pro-

grams for roads and infrastructure?

 ese were the questions aired to the panel during the "Bigger Vessels - Bigger challenges" discussion moderated by Max Boodie on Tuesday a • ernoon.

### **Pannel Discussion**

Jost Bergmann, Business Director for Container Ships at DNV GL, opened by asking if it really made sense to build bigger and bigger vessels. However, no clear answer was forthcoming for this question, neither for the the next question posed by PD Dr Christian Growitsch, Director of the

Hamburg Institute of International Economics (HWWI), who wanted to know: "who will pay for it?". Olaf Merk, Administator Ports and Shipping, International Transport Forum (ITF) at OECD, pointed out that there is a "disconnect between shipping lines and infrastructure". Jörg Pollmann, Harbour Master of the Port of Hamburg, also held the opinion that shipping lines fail to talk adequately with ports about infrastructures and planning for the future. Capt. Salvatore Ca •ero, Environmental Manager & Training O • cer at MSC P/Sorrento, on the other hand, stressed that MSC already collaborates closely with ports and port authorities.

### **IAPH Voting App**

Moderator Max Boodie then asked the audience to vote via app whether it makes sense for one member of the logistic chain to bene •t from ultra large ships at the expense of other parties. • e result was very clear indeed: 65 per cent of the voting participants responded with a de • nite "no". Reacting immediately to this poll, Olaf Merk proposed a global discussion with all involved parties.





395 m long and 59 m wide the "MSC Oscar" is currently the world's largest container ship PHOTO: HASENPUSCH

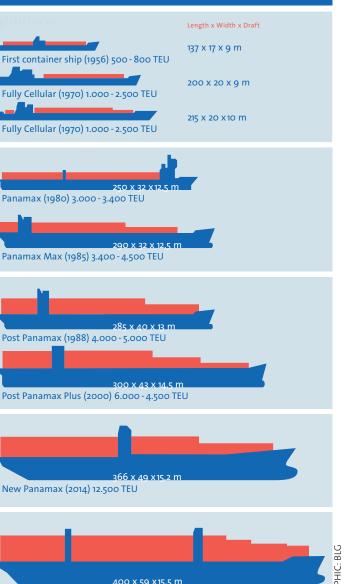
# What's the Limit for Mega Boxers?

Trend continues – New orders smash the 20 000 TEU barrier

Rapid growth in the size of container ships raises the simple question: Where is it all going to end? After all, forecasts in recent years have always been exceeded earlier than predicted.

• e latest chronology of new orders for ultra large container ships reinforces this trend. Whilst the 20,000 TEU limit for mega boxers seemed a wild dream only a few years ago, this threshold was crossed for the •rst time with the announcement in early March this year of Mitsui O.S.K. Lines' order of six 20,150 TEU carriers to be built for the Japanese shipping line by Asian shipyards and delivered by 2017. Just one month later • e Hong Kong line OOCL broke this record by ordering six vessels with 21,100 TEU from Samsung Heavy Industries, scheduled for delivery in November 2017. French shippers CMA CGM too are investing in this size category with an order for three 20,600 TEU vessels awarded to Hanjin Heavy Industries, delivery also to be taken in the la•er half of the year a • er next. Rumours even abound of an uncon • rmed order for more than eleven container ships in the 20,000+ TEU segment submitted to Imabari Shipbuilding.

Currently the Mediterranean Shipping Company's



**CONTAINER SHIP GROWTH** 

"MSC •Oscar" is the world's a capacity of 19,224 TEU it biggest container ship. With superseded China Shipping

Triple E (2013) 18.000 TEU

Container Lines' 19,100 TEU "CSCL Globe" a • er a space of just two months.

As far as design and stability of ultra large container ships are concerned, the limit seems to be far higher still. Furthermore, the demand for larger ships will continue due to economies of scale driving down transport costs per container. According to Jost Bergmann, Business Director for Container Ships at DNV GL, there are no technical problems to build 24.000 TEU freighters in the future. Other experts go even further and envisage mega boxers with a capacity of 30,000 TEU.

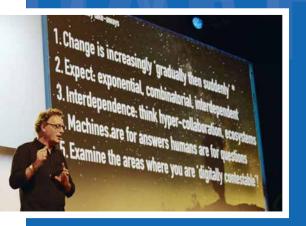
Nevertheless, container giants face restrictions in width and dra• in navigation channels and seaport infrastructures even today. Ports, freight terminals, logistics services and hinterland tra • c are faced with completely new challenges, not only requiring enormous investment, but organisational know-how as well. As the key interface in the logistics chain, ports must be equipped to cope with growing container numbers at peak times. "Bigger vessels and bigger challenges" demand more intelligent solutions. What these solutions might look like can be seen in the smartPORT projects presented by the Hamburg Port Authority at the 29th World Ports Conference.





Impressions
Spectacular stage
show and business
network





The scene for yesterday's opening event was set by a spectacular stage show: A container on passage from Tokyo, where the IAPH is based, to Hamburg, the location for this year's event, took the audience on a voyage to the smartPORT in the truest sense of the word. With trampoline artistes, drummers and light installations the scene was ablaze with colour and activity. Along with talks and debates on current issues affecting port operations all over the world, guests have an ideal opportunity to exchange views and experience with peers and particularly intensify their business network. The conference promotes this aspect specifically by providing an exhibition, trade fair and a varied, interesting and entertaining support program.

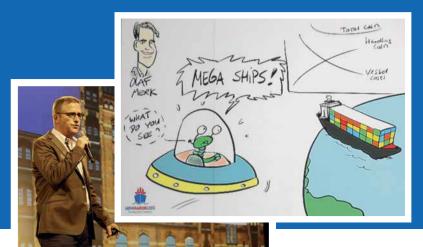














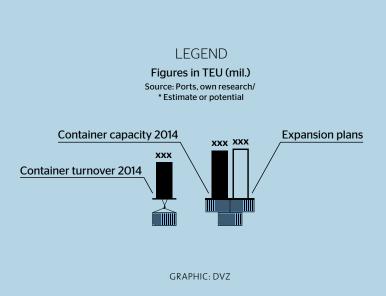
# Europe's ports on growth course

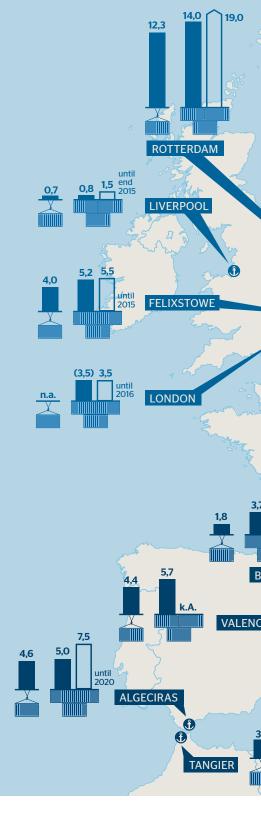
### Capacity investment for large container ships

Europe's ports are stocking up. From Meerbusen in Finland to the warm waters of the Aegian, seaports are massively expanding their cargo handling capacities. A major reason for this is to be prepared for the new generation of ultra large container ships. The "Daily News" shows a European overview here.

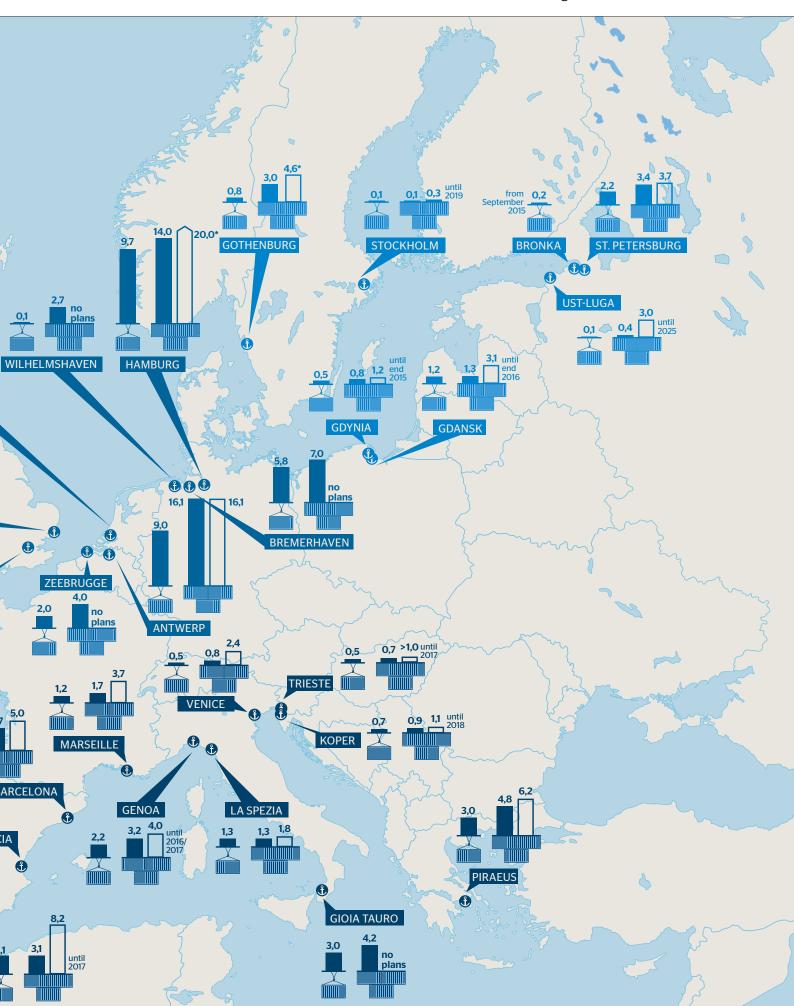
The map shows 28 ports, including market leader Rotterdam, second largest Antwerp, Hamburg in third place, and newcomer Bronka. The new multi-purpose port in St. Petersburg will begin first phase operations in September after a 400 million euro investment program. It is planned to develop the location systematically in years to come with a view to optimise processes and vastly increase cargo handling capabilities. In phase one capacities of 200,000 TEU will be available. In further development stages, for which no dates are currently confirmed, two and later even five million TEU will be possible. For RoRo cargo handling an initial annual capacity of 2.4 million tonnes is foreseen.

The construction boom is founded on the hope of lasting growth in container shipping. For the current year experts from the Bremer Institut of Shipping Economics and Logistics (ISL) and consulting company Hackett Associates forecast growth of around three per cent for the European ports. Indeed ships' capacities are growing rapidly, primarily due to large size container vessels. Around 300 ships with 10,000 TEU and more are already in service and a further 165 ordered, according to market experts from Dynamar. 50 of these will be able to carry at least 19,000 TEU. Recently it has been rumoured that market leader Maersk Line intends to invest in the largest available units and order up to eleven 20,000 TEU container ships.





### SMARTPORT logistics | IAPHHAMBURG2015





# Pioneering energy technology

Hamburgs Vessel Traffic Service Centre – One of the most modern facilities worldwide

The Port of Hamburg's Vessel Traffic Service Centre (VTS Centre) is one of the most modern facilities worldwide.

A • er a two-year renovation period, twelve months ago to the day Hamburg Port Authority (HPA) completed the refurbishment of the Vessel Tra • c Service Centre (VTS Centre) at Bubendeyufer.

Frank Horch, Hamburg Minister for Economic A•airs, Jens Meier, Chairman of the Management Board of the Hamburg Port Authority (HPA), and Jörg Pollmann, Harbour Master, o• cially inaugurated the new building. Over one hundred guests were joined by hybrid tug "Eddy", one of the most modern tugboats in service, to celebrate the occasion.

"In view of rising tra• c volumes, ever larger container vessels and the need to ensure that the port maintains its competitive edge, refurbishment was necessary to bring the facility up to date with regard to technical, space-planning and energy-saving standards. • e VTS Centre is a core piece of the Port of Hamburg. Whether container ships or dinghies - nothing in the Port of Hamburg escapes the notice of sta • at the VTS Centre," says Horch. From January 2012 to June 2014 the old building was extended and the technical equipment upgraded to meet the speci oc needs of the navigators and accommodate future developments.

e VTS Centre, one of the most modern

vessel surveillance centres in the world, monitors and coordinates vessel tra• c in the Port of Hamburg. At the same time, it is a vital element in the HPA's e•orts to make our vision of a smartPORT become reality," states HPA Chairman Meier.

One of the aims was to create an e • cient and exible work environment where people and technology come together to connect and collaborate. Before actual work commenced the HPA, in co-operation with the University of Hamburg and the Hamburg Informatik Technologie Center [Technology Centre for Computer Science], made detailed examinations of work processes and technical systems at the VTS Centre. • e results of the joint project formed the basis for the spatial and technical design of the new construction. "• e new VTS Centre makes us wellplaced for the future, enabling us to provide e • cient and safe navigation in the Port of Hamburg. On top, we were able to signi • cantly improve working conditions for our colleagues," says Harbour Master Pollmann.

### **Technical improvements**

Many of the technical tools and equipment used at the nearly 6.5 million euro investment were speci•cally developed to meet the needs of VTS operators. • e new VTS Centre boasts technically highly advanced work stations and state-of-the-art equipment. Amongst others, it features

a high-resolution large screen to display nautical information with interface to all nautical work stations. • e information is supplied by the Port Monitor, a control station system.

A thermal ice storage system with heat pump to e• ciently use waste heat has been installed in the new building on the Seemannshö•. Underground water pipes absorb the excess heat which, due to the relatively constant ambient temperature of the earth, can be stored slightly above freezing point and fed back to the heating system at the start of the heating season. If heat is withdrawn from the ice storage system, the liquid in the water pipes will freeze, releasing crystallisation energy that is used to cool technical equipment in the VTS Centre.

### **About the VTS Centre**

• e VTS Centre on the Seemannshö•, including the radar centre to the east of the pilots' station on the Seemannshö•, was built from 1975 to 1977. As a •eld o• ce of the Harbour Master's Division it is in charge of monitoring and regulating vessel tra• c within the area of the port. A team of •ve VTS o• cers are on duty around the clock to ensure safe navigation on the waterways, supported by ultra modern tra• c surveillance systems. During the refurbishment period the VTS Centre was housed in the emergency response VTS Centre at Veddeler Damm.



Exhibition Area Food & Beverage Fvent Area



## Programme Highlights Wednesday 3RD

Challenges and Solutions for Smartports

09.20 - 09.40 Why do Ports have to become Smart?

Wim Elfrink, Cisco Hall G, CCH

10.10 - 10.30 smartPORT Hamburg - "How to Dress for

Jens Meier, Hamburg Port Authority

Hall G, CCH

10.30 - 10.45 **An Arabian Perspective on Industry Trends:** 

A View from the Bridge of DP World

Patrick Bol, DP World Hall G, CCH

Demands on intelligent Ports: Where is there a 11.05 - 12.00 **Need for Action?** 

Discussion with Volker Worthmann, Wim Elfrink. Jens Meier, Patrick Bol, Michael Pal, José García de la Guia, Max Boodie

Hall G, CCH

13.15 - 13.35 International Environmental Standards at Sea -

> **Development, Implementation and Monitoring. Consequences and Future Developments**

Monika Breuch-Moritz, Federal Maritime and

Hydrographic Agency

Hall G, CCH

Global Transport Needs Sustainable Ports -14.50 - 15.00

**LNG** as Part of Greenports

Robert Howe, Bremenports GmbH & Co. KG

Hall G, CCH

15.00 - 15.45 **Alternative Actions in Times of the Energy** 

Transition: How "Green" do Ports have to be?

Discussion with Monika Breuch-Moritz, Henning Kinkhorst, Gun Rudeberg, Lutz Birke, Robert

Howe, Max Boodie,

Hall G, CCH

18.30 **Bali Night** 

Beach Club Hamburg



14.00 - 15.00

Bernd Appel, Managing Director, **Lufthansa Industry Solutions** 

Jens Meier, Chairman of the Management Board **Hamburg Port Authority** 

Lars Reger, CTO, NXP



# Daily News



4. June 2015 | No 3

www.thb.info/iaph



www.dvvmedia.com



Chance meeting in the port of Hamburg: New megaboxer "OOCL Singapore" (13208 TEU) meets sister ship "OOCL Bangkok"

# German ports need to cooperate

New study – A stronger partnership can improve competitive position

Companies in the transport sector would like to see more cooperation between the large German ports in Hamburg and Bremen in order to handle increasing freight volumes more efficiently.

• at is the result of a study published by HSH Nordbank, which was presented yesterday on the third day of the World Ports Conference in Hamburg. A major •nding of the survey is the fear many companies in the transport sector have of capacity bo•lenecks leading to a loss of business in the Port of Hamburg. Dr. Marcus Kleiner, expert for logistics and infrastructure at HSH Nordbank, suggests that cooperation with the Bremen ports and the JadeWeser-Port in Wilhelmshaven could strengthen

the competitive position of these ports in relation to Ro•erdam and Antwerp.

Within the framework of such a cooperation and as a means to reduce transit times and alleviate the Port of Hamburg, ships from Asia on transhipment container runs, could, for example, •rst call at JadeWeserPort.

• e study is based on a poll to page 8 →

ADVERTISING



ports of vlissingen and terneuzen www.zeelandseaports.com

driven by dedication



### CONTENTS

German ports need to
cooperate 1 + 8
Shipbuilding & Service 2
Fewer emissions
IT Experts discuss terminal technologies
smartStowage
Impressions 6 – 7
Power from the box 9
smartPort logistics
Map & Highlights

## Cooperation on hull performance

DNV GL and the Norwegian paint manufacturer Jotun signed a cooperation agreement to work on improving hull performance at Nor-Shipping yesterday. • e project will bring together two performance management services, Jotun's Hull Performance Solution and DNV GL's ECO Insight solution, to collect and analyse data on hull degradation. • is will enable customers to cut their fuel bills and reduce emissions.

## 11 Triple-Es for Maersk

New ultra-large second generation – 1.8 billion dollar value

Maersk Line announced it has now ordered eleven new ultra-large second generation Triple-E containerships from Daewoo Shipbuilding & Marine Engineering (DSME).

- e new vessels will be the shipper's largest and are intended to enter Asia Europe service between April 2017 and May 2018. e contract has a value of 1.8 billion dollars including an option for six additional vessels. e ships will have a capacity of 19630 TEU each, a length of approximately 400 meters (m), width of 58.6m and a 16.5m dra •.
- e contract was signed by Sung-Leep Jung, President and CEO of DSME, and Søren Skou, CEO of Maersk Line, during a ceremony at Maersk Line's headquarters in Copenhagen.
- is is the second new-building order in Maersk Line's investment program, following the seven 3600 TEU feeder vessels announced earlier this



Triple-E Construction at Daewoo Shipbuilding in South Korea

year. Over the coming •ve years, Maersk Line plans to invest \$15 billion in new-buildings, retro••ing, containers and other equipment, the company said, noting it will thus be able to maintain the necessary capacity to grow with global demand as well as replace less e• cient tonnage.

ese vessels will help us stay competitive in the Asia - Europe trade and will be key in our strategy to grow with the market," said Søren To•, Chief Operating O• cer (COO) at Maersk. "It is the second order this year and we expect to order more vessels to add to our •eet from 2017 and onwards." Maersk Line has a long relationship with DSME. Most recently, DSME built the •rst generation Triple-E vessels, the last 20 of which will be delivered in June 2015.



### Grand Gala Dinner

The Fish Auction Hall – directly on the Elbe

This evening visitors to the World Ports Conference will be celebrating the Grand Gala Dinner. In former times the location had a quite different purpose.

The "Fischauktionshalle", address Große Elbstraße 9, was the hub of the fish trade in Hamburg.

Built in the 19th century as a central market place, today the Fischauktionshalle is primarily an event location. Nevertheless, the impressive red brick construction still pays tribute to the port of Hamburg's remarkable history. The Altona Fischauktionshalle with its industrial appeal and rough charm is one of the city's top tourist sites and attraction for up to 4200 people. Kaiser Wilhelm II. opened the construction in a grand ceremony in 1896.

### **IMPRINT**

### **IAPH Daily News**

is published daily during 29th World Ports Conference 2015 by DVV Media Group GmbH

**Editors** Frank Binder (resp.) Claudia Behrend, Tim-Oliver Frische, Björn Helmke, Melanie Graf, Jan Peter Naumann, Ariane Wagner

**Translation** Michael T. Roberts

**Design** Andreas Gothsch

### Advertisements

Tilmann Kummer +49-40-23714-0

**Distribution** Markus Kukuk

**Print** Albert Bauer Companies

### Copyright 2015

HOTO: TIM BRUENING

DVV Media Group GmbH

## "Kind of a revolution"

Stricter international environmental standards at sea to be expected in the future

Sea transport of containers has a reputation of being climate friendly due to low carbon dioxide (CO2) emissions per tonne kilometer. However, the act of shipping throws immense quantities of harmful substances into the atmosphere all around the world. This has led to a number of international environmental regulations at sea being passed, some of which are already in force. Others to come are being discussed at committee level.

"Why do we need regulations?" asked Monika Breuch-Moritz, President of the Federal Maritime and Hydrographic Agency (BSH), as she opened her lecture on the subject "International environmental standards at sea" on Wednesday a • ernoon in the CCH.



BSH President Monika Breuch-Moritz

PHOTO: HINRICH FRANCK

• e answer is quite simple: Whereas in the past shipping was seen as a major contaminator, new regulations have contributed to a more positive view in recent years. Breuch-Moritz pointed out that the discussion is presently dominated by three main issues: ballast water, sewage and air emissions.

"MARPOL Annex VI on air emissions is a good example on how regulations developed and how they are monitored." Although the •rst reduction of sulphur dioxide for the Baltic Sea as Sulphur Emission Control Area (SECA) was adopted as early as 1997, it did not come into force until 2005. "Limitations at that time were still too high", she explained.

"Public awareness of environmental protection has grown immensely during the last 10 years in the US and Northern Eu-

rope. Nevertheless, the majority of countries were reluctant to support legislation beyond IMO rules (International Maritime Organisation)."

Since 2015 stricter sulphur dioxide regulations have been introduced for the SECA in the Baltic and North Sea and on both North American coasts: Fuel is only permi•ed to have a maximum sulphur content of 0.1 per cent. From 2020 or 2025 at the latest a limit of 0.5 per cent is foreseen.

"• e new regime will be a kind of revolution", said Breuch-Moritz. "I sincerely hope that the worldwide regulation will enter into force in 2020."

For Germany she is pleased today about the positive results BSH has been measuring: Sulphur dioxide emissions in January this year were signi • cantly lower than December 2014.

Come to check-in. Your gate to sea. Nutzen Sie die Kombination Schiff & Hafen Umschlags- und Handelsgesellschaft Haldensleben mbH Börde Container Feeder



IT technologies are moving into ports all over the world: Agreement from Wim Elfrink (Cisco), Jens Meier (HPA), Volker Worthmann (Lufthansa), Moderator Max Boodie, José García de la Guia (Port of Valencia), Michael Pal (Port of Fremantle) and Patrik Bol (DP World) (from left)

# "Think big – Start small"

International IT- and port experts explain smarter infrastructure for terminals

How to handle increasing container volumes in the shortest conceivable time in an area of constant size? That is only possible using the latest cargo handling equipment and intelligent IT systems. Experts from the technology sector and port managers found agreement on this subject during a podium discussion at this year's IAPH Conference in Hamburg.

"24 hours to load and unload 6000 containers – that will become the new standard."
• ese words of Patrick Bol, Director Global Operations at terminal operator DP World, describe the challenge facing container ports. Such volumes not only make huge demands on the terminals but also on traf•c infrastructures in the hinterland.

"Ports can only be intelligent when freight and transport data are seamlessly linked," added Jens Meier, Chairman of the Management Board at Hamburg Port Authority (HPA) referring to the Smart Port Logistics Project in the Port of Hamburg. José García de la Guia, IT Head for the Port Authority of Valencia demonstrated the bene •ts of such links commenting, "Information on ship arrivals and freight volumes could, for example, •ow into traf•c forecasts."

Conditions for such systems to be realised in the individual ports are far from homogenous. "For an IT project there's a big di•erence between starting from scratch or having to work one's way into an existing system envrionment," says Wim Elfrink, Executive Vice President, Industry Solutions and Chief Globalisation O• cer of the IT corporation Cisco. Cooperation between the public and private sectors is essential if smart ports are to have a chance of success. HPA boss

Meier believes that there's no way round smart port concepts. Compared to the construction of physical port infrastructure IT projects are inexpensive. Volker Worthmann, Director Transport and Logistics at Lu•hansa Industrial Solutions, nevertheless advised against unmanageable mega projects. "• ink big, start small," his tip.

• e fact that even small ports can create smart systems with reasonable cost and effort was proved by Michael Pal, Principal Transport Analyst at the Australian Fremantle Ports, with his own example: • e port authority records truck congestion on a video system which allows it to identify which terminal is responsible for any upsets to normal processes. Since introduction of the system tra• c • ows in all areas of the port have visibly improved – as have clearance times for trucks.

# THE RED SOFA

## Bomb scare stops talk

Sofa talk with Jens Meier not possible

Jens Meier, Chairman of the Management Board Hamburg Port Authority (HPA) and host of the 29th World Ports Conference in the Congress Center Hamburg (CCH) was calm, cool and collected - in spite of a bomb scare that prevented his sofa talk from taking place as scheduled.

• e details: 14.15 on the dot, the •rst talk with Bernd Appel, Managing Director Lu•hansa Industry Solutions, and DVV moderator Tim-Oliver Frische had just •nished. • en IAPH Chief Organiser Sabine Stüben (HPA) approached and-told us in a clear and unmistakeable voice to evacuate the room -immediately".

Frische, Meier and Appel (photo le• to right) did as instructed but found time to have an informal chat in the foyer. "I've learnt to di•erentiate between what's important and what's essential," said a cool-headed Meier - Respect.

Nobody would have expected the entrance door to the Red Sofa to remain



closed for so long. No further talks took place for the rest of the day. It appears the whole world in these days of Germany's Next Topmodel has become more cautious - the live broadcast of the recent • nal was cancelled due to a bomb scare.

• e "bomb" turned out to be a harmless brief case that someone had le• whilst nipping out for a cigare•e. Smoking, it seems, is not only bad for the health, but can also be a cause of misfortune for Red Sofa talks at the IAPH.

# smartStowage gives back time for collaboration

Early and detailed communication could become a key factor for success

Digitalization of the maritime industry and associated logistics might mark the beginning of full networking for all players in the logistics chain.

Port operators are developing digitalized management systems for optimizing tra • c •ows, terminal operators are automating systems for handling goods, and liner operators can use modern so • ware solutions to improve shipping operations and capacity utilization. Early and detailed communication and data availability could become a key factor for successful collaboration.

### Logistics 4.0 starts with stowage

Ship arrivals remain the starting point for any integrated port logistics chain. Ocean carriers and terminal operators have a special interested in port stay times, cargo intake and moves, as well as fuel oil consumption. A professional stowage plan provides answers. It includes not only details of the cargo planning according to the port rotation, but takes into account the proper separation of specific loads, makes full use of the cranes at ports and ensures the sustained stability of the container ship. The more carefully all factors for stowage planning are considered, the greater the benefits for liner companies and terminal operators. With a view to integrating even more relevant factors for stowage and producing results for al-



A professional stowage plan provides answers

ternative stowage plans very quickly, Interschalt maritime systems, in co-operation with the IT University of Copenhagen, developed the stowage planning software Stow-Man[s] launched in 2014. software generates multiple economically and

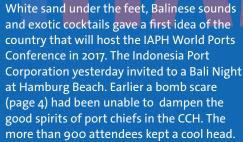
logistically optimized stowage plans in next to no time by producing alternatives on an iterative basis. The resultant time savings allow the stowage planner in consultation with the terminal operator to plan perfect loading and discharging operations.

### Influence on terminal operation

Using StowMan[s] could create a win-win situation for liner operators and terminals. Liner operators bene•t from an increased ship capacity utilization. At the same time, fuel consumption can be reduced thanks to trim optimization. Terminal operators enjoy the bene •ts of be • er, foresighted coordination of all terminal processes. • ey begin before the ship even arrives and can be seen in an improved yard organization, as early and extensive information improve the berth allocation, container prestow and the planning of storage areas for cargo remaining at the port. Calculating the crane capacity required for transshipment and the intensity of crane use has an in • uence on terminal operations too. Precise details of the process times for container moves allow appropriate scheduling of container gantry cranes and their crane operators and the additional equipment used for loading. Beyond transshipment at the quayside, it is important to prepare for the further transport of cargo by rail or road. Optimum data and information made quickly available are particularly bene cial for the port operator's tra • c management. smartStowage tools like StowMan[s] save time in the creation of stowage plans. If all members of the supply chain could use these time savings during their planning phases, current theoretical advantages of a networked collaboration could become best practice.



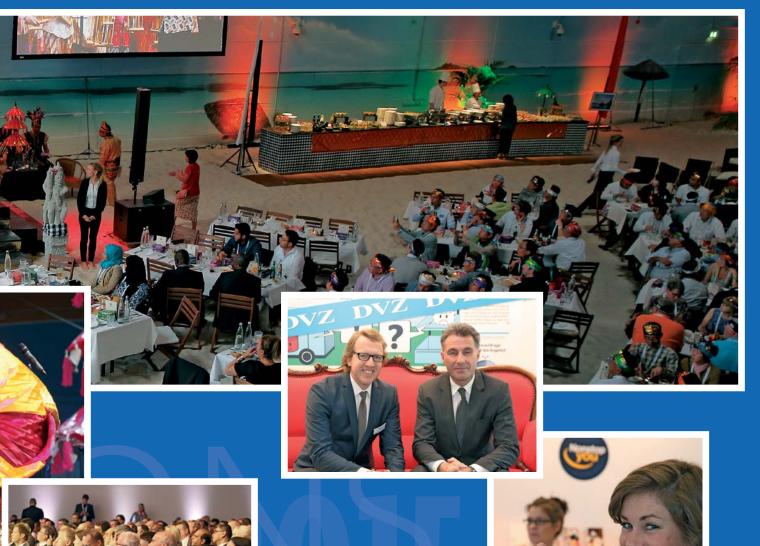
# Impressions Conference, Cocktails & cool Chiefs





















# Competition for sea transport

China to invest billion dollars in the new Silk Road

from page  $1 \rightarrow 0$  of 50 companies in the transport sector who had responded negatively to questions on the Port of Hamburg.

· e most important infrastructure projects for the Port of Hamburg are the deepening of the navigation channels in the River Elbe, realisation of the high speed rail link between Hamburg, Bremen and Hanover as well as continued expansion of the port railway. "• ese projects must be realised promptly otherwise Hamburg will lose freight volumes to other North Range ports," warns Kleiner. Since the Port of Hamburg cannot expand its area, be • er organized processes and transport ·ows could arise, according to the companies polled, if certain functions were delegated to the hinterland, e.g. container sorting, and the port railway network extended. More e • ciency through deployment of intelligent IT tra • c management systems, on the other hand, is not seen by these companies to hold much prospect of success.

• e vast majority of companies in the poll would be prepared to support the urgently needed development of port infrastructure in the form of user •nancing, that is, toll charges - as far as their own companies would pro•t from such a measure.

### New rail link to Asia as future alternative to sea route

Relief for the Port of Hamburg is also promised by new rail links along the route of the ancient Silk Road from Europe to China (see map above). "To a certain group of clients these rail links are already an alternative to the sea route", says Kleiner. Although the direct Germany-China rail connection has so far only been used by a few companies, several others have announced that the routes would also open new trade opportunities for them to Eastern Europe, Russia and Asia.

China is currently investing massively in infrastructure projects, not only in its own country, but in the development of global trade routes. • is role played by China



Dr. Marcus Kleiner

strengthens its power position in international trade and is a policy most of the polled companies are convinced China will continue. "Only through the necessary investment in higher infrastructure e• ciency will the North German ports be able to hold onto their position in international transport logistics", concludes Kleiner.

# Power from the box

Hapag-Lloyd uses onshore concept for its container ships

Since 2012 the Hapag-Lloyd shipping line has been using a concept for providing shorebased power to its container ships in US ports. It can be applied to almost all ships in the fleet, irrespective of shipboard voltage or power requirements at berth.

When the "Dallas Express", operated by the Hamburg shipping line, sails into the port of Oakland in California one 40 foot container on deck will not be unloaded. For the white box with conspicuous green le • ering on the side contains hardware to enable the ship to use electricity generated onshore. • e technical solution earned the liner service this year's "Hanse Globe" prize for sustainable projects awarded by the Logistic Initiative Hamburg (LIHH). "We see responsibility and sustainability not as a short-lived fashion trend, but as a key to long-term success and are particularly pleased to receive this award in and from our home city", says Rolf Habben Jansen, Hapag-Lloyd CEO. Supplying electricity from o • - ship sources to power onboard facilities whilst in port is gaining importance as a means of protecting the population and environment from ship emissions in and near port and coastal areas. • e principle of providing ocean-going vessels with onshore power when docked currently seems to be a be • er solution to reduce emissions than •oating generators.

Known as Onshore Power Supply (OPS), Alternative Mari-

time Power (AMP) or Cold Ironing, the basic idea is that a ship's auxiliary diesel engines, which otherwise generate electricity to power the ship's essential functions at berth, can be switched o. completely, tricity being provid-

ed instead by a generator located in the port itself or directly from the local electricity grid. • e fact that auxiliary engines remain idle represents a major factor in reducing health hazards and pollution caused by sulphur dioxide and •ne particle emissions; hence air quality is improved, particularly in port locations and surrounding areas. Noise levels are also lowered.

Authorities have taken many di erent measures to reduce the ecological impact of ship emissions in port and coastal areas. • e solution to feed power generated onshore into the ship's electricity system when in port was heavily pushed by the state of California, which since January 2014 requires 50% of a shipping line's vessels sailing into Californian ports to use onshore power, further to a total 50% reduction in electricity consumption by all incoming ships. With other ports throughout the world working on similar onshore power concepts, the need for

ports to agree on a uniform technical standard was important for shipping lines, since it takes a lot more to utilising onshore power than merely inserting a plug into a socket.

Hapag Lloyd cooperated with the Port of Oakland in a pilot project culminating in its "Dallas Express" being the •rst ship to successfully connect to onshore power on 3rd December 2012, shortly a • er the port had completed the necessary investment in technical infrastructure in August 2012. Onshore power supply is also known as High Voltage Shore Connection (HSVC). For a ship to use onshore power voltage must be converted from 6600 volts on land to 450 volts on board through an 8 ton transformer located next to the rudder engine room. Newer ships on a 6600 volt system, including the ten new 13200 "Hamburg Express" class vessels, are already compatible, so the container can easily be operated on routes also to the Far East when onshore power supplies are available in ports there.

Hapag Lloyd developed the special container with the electric components to tap onshore power with the Hamburg company SAM Electronics. Located at the stern of the ship, the 40 foot box contains a cable on a drum that can be extended and connected to the power source on land. Further features of the drum are its ability to automatically compensate for tidal li• and a lock preventing accidental disengagement. • e container is compatible for use on almost the entire •eet, irrespective of on-board voltage and power requirements, therefore can be transferred to another vessel if the ship is placed on a di•erent route or in times of maintenance or repair. 21 ships in the Hapag Lloyd •eet are currently ••ed with this •exible solution, therefore are not only able to use onshore power in California, but in all ports conforming to international Standard 80005-1.



PHOTO: HAPAG-LLOYD

# Full steam ahead for the port of the future

"smartPORT logistics" in regular operations – More efficient flows of goods – Shorter waiting times and fewer backlogs



Shorter truck waiting times for the Port of Hamburg

PHOTO: TELEKOM

The Port of Hamburg is setting off with the logistics system of the future.

- e Deutsche Telekom subsidiary T-Systems and the Hamburg Port Authority (HPA) have signed a contract that will launch regular operations with this globally unique logistics system. "smartPORT logistics" enables the Port of Hamburg to coordinate truck and container movements more e • ciently. • is reduces logjams and waiting times in the port area and increases cargo turnover. • e HPA plans to connect as many trucks as possible that travel through the Port of Hamburg daily with the app-based telematics solution.
- e foundation of this project is an original equipment manufacturer (OEM) agreement between T-Systems and SAP for "connected logistics". Connected logistics is a logistics solution that addresses

the needs of logistics centers for seaports, airports, parcel distribution centers and manufacturing sites. "Today, the logistics industry o • en faces the challenge of having to optimize •ows of goods in a limited area. With smartPORT logistics, we make it possible for the HPA, for example, to manage their •ows of goods in real time and therefore to use their limited space e • ciently, "says Horst Leonberger, head of Deutsche Telekom's Connected Car unit.

### One additional load per day

In Hamburg, the "smartPORT logistics" system brings all the relevant tra • c and infrastructure data of the 72-square-kilometer port facility together in real time: the locations of trucks and containers, terminal and warehouse information, construction sites, bridge opening times, and available parking spaces. It gives port

managers, freight forwarders and parking lot operators a comprehensive picture of the situation at all times, enabling them to react to tra • c congestion quickly. " • e smartPORT logistics solution supports the Hamburg Port Authority in coordinating tra • c • ows more predictably," says Nils Herzberg, SVP, Global Co-Lead, Internet of • ings GTM at SAP. "• e solution helps us anticipate surprises. Since it works with real-time data, its recommended actions are based on facts, not conjecture."

### All real-time data in one application

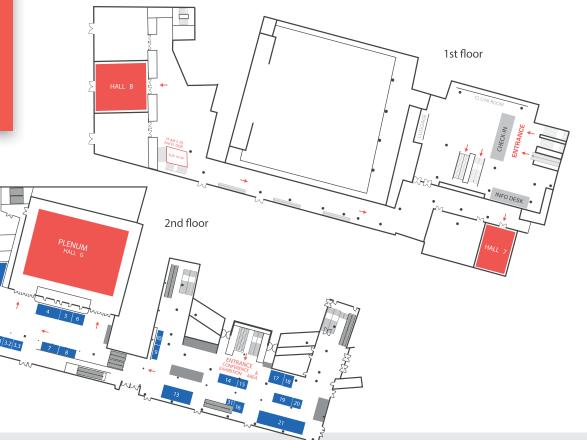
smartPORT logistics is a private cloud application based on the T-Systems Connected Car platform and the SAP Connected Logistics-So•ware by SAP. • e application uni es freight data with telematics system information from a variety of providers, as well as the tra • c and infrastructure data from the HPA. Deutsche Telekom also provides an Android app, which serves as the telematics unit in the trucks. • e SAP Connected Logistics so • ware then merges all the real-time data and provides it to users in an online portal.

### More freight, same space

"Our goal is to achieve a truly smart-PORT. • is includes ensuring the best possible supply of information for everyone involved in port operations," says Jens Meier, Chairman of the Management Board of HPA. "With smartPORT logistics, we have begun connecting everyone involved in the supply chain, enabling them to coordinate their processes with one another in real time. If everyone participates, we are on the right path." • e Port of Hamburg is Europe's second-largest port. In the past year, the port handled nearly ten million containers. • is •gure is expected to double by the end of 2025. Due to its location in the heart of the city, however, there are geographic limitations to its ability to expand.



Exhibition Area Food & Beverage Fvent Area



### Programme Highlights Thursday 4<sup>™</sup>

### Future Trends for Cruise Shipping and Ports

09.00 - 09.30 What is the Role and History of the United

**Nations for the Maritime Industry?** 

Michael Shewchuk, United Nations

Hall B, CCH

10.00 - 11.00 The Importance of Law for Trade and Ports

> Discussion with Michael Shewchuk, Frans van Zoelen, Christoph Hasche, Marcus John,

Hall B, CCH

10.05 - 10.15 **Development of the Cruise Shipping Industry** 

in the Port of Hamburg

Michael Ungerer, AIDA Cruises

Hall G, CCH

Smart Terminals - smartPORTs: What Can Ports 10.15 - 10.25

**Contribute to a Dynamic Cruise Industry?** 

Bo Larsen, CLIA Hall G, CCH

10.25 - 11.10 The World is Going on a Cruise: Does Growth in Tourism Come at the Expense

of the Environment?

Discussion with Douglas Ward, CHA Min-sik, Roberto Perocchio, Bo Larsen, Michael Ungerer,

Max Boodie,

Hall G, CCH

**How Diversity Contributes to Smart Thinking** 11.40 - 13.25

> Forum with Dr Geraldine Knatz, Dr Maria Carolina Romero, Dr Phanthian Zuesongdham,

Dato' Capt. David Padman,

Hall B, CCH

12.30 - 12.40 Hong Kong's Action to Clean Up

**Maritime Emission** 

Christine Loh, Hong Kong Special Administrative

**Region Government** 

Hall G, CCH

**Closing Ceremony** 14.15 - 14.45

Hall G, CCH

**Gala Dinner** 

Fish Auction Hall



19.30

### <u>'ODAY'S SOFA TALK</u>

from 13.25

Axel Mattern, CEO, Port of Hamburg Marketing

Jörg Pollmann, Chief Harbour Master,

**Hamburg Port Authority** 

Ulrich Wrage, Chairman, DAKOSY

Jens Meier, Chairman of the Management Board,

**Hamburg Port Authority** (expected)



# Daily News

Lufthansa ustry Solutions Your future is digital.

5. June 2015 | No 4

www.thb.info/iaph



www.dvvmedia.com



# From Hamburg to Bali

30th IAPH World Ports Conference 2017 to be held in Indonesia

With today's congress finale Hamburg hands over the baton for the 30th IAPH World Ports Conference 2017 to the Indonesia Port Corporation, who will stage the event in the Bali Nusa Dua Convention Center in Denpasar, the Bali capital, on 1 - 4 May 2017.

As future host nation Indonesia presented itself within the framework of the 29th IAPH World Congress in Hamburg with an atmospheric "Bali Night" on Wednesday evening, providing a foretaste for the next event in two years time. Further information was on hand for conference participants at the exhibition booth in the Hamburg Congress Center giving details of port development projects and planned investments.

• e Consulate General of the Republic of Indonesia in Hamburg also used the opportunity to invite guests to an information event at the Chamber of Commerce, where, among others, Ridwan Djamaluddin, Deputy for Infrastructure and Coordinating Minister for Maritime A • airs of Indonesia, as well as R. J. Lino, President

Director of PT. Pelindo II, talked about the subject "Indonesian Economic Updates: Economic Potentials through Maritime Sector Development". Hamburg's Senator for Economic A • airs Frank Horch pointed out the long tradition in trade relations between Hamburg and Indonesia. Currently Hamburg imports goods valued at 600 million euro each year from Indonesia, whilst around 400 companies from Germany are active in Indonesia, 25 of these with their own subsidiaries. Indonesia is giving foreign companies big incentives at



Future host Indonesia also with an information booth in the CCH PHOTO: FRANCK

the moment to develop local manufacturing industry and expand logistics capabilities. To facilitate this a "One Stop Service for Investments" has been set up as contact and coordination point for enquiries.

Indonesia, with 17,500 islands and more than 250 million inhabitants, is the world's largest island state and fourth largest nation by population. Economically it ranks 16th worldwide. Analysts see Indonesia, as part of the rapidly growing Southeast Asia region, amongst the fastest growing markets with the potential to move up to rank 7 amongst the global players by 2030. One factor for Indonesia's climb into the top ten group of leading economies will be its growing class of a • uent consumers, whose number is forecast to jump from 45 million now to 135 million by 2030. Gearing itself towards this •gure, the government is stimulating the economy in an e ort to raise the current annual growth rate of 5.2 per cent to seven per cent.

• e 2015 to 2019 Medium-Term Development Plan is a major investment program launched to achieve this goal. Most of the investment will be made in infrastructure,  $\rightarrow$ 

### CONTENTS

Focus: 30th IAPH World Port Conference in Bali 1–2
LNG for Shipping: Risks and Opportunities
Clean Air in Ports 4
Cruise Ships and Ports: Now and Future Trends 5
Impressions 6 – 7
smartPort Logistics 8
Less Waste - Clean Propulsion Energy 9
Today: smartPort Projects in Practice 10 – 11



Indonesia intends to boost expansion of its ports with a mammoth investment program. The largest current project is expansion of the Tanjung Priok Port in North Jakarta

from page 1 → particularly the expansion and modernisation of Indonesian ports. Maritime investment will account for 79 billion dollars, with the number of ports increasing from 278 to 450 and new shipping routes being created. Indonesia's President, Joko Widodo, intends to develop his country into a "global maritime axis", an ambition involving creation of a "maritime highway" linking the eastern part of the giant archipelago more strongly to the economic centre in the west of Java and around the capital Jakarta. • is strategy in future could, for example, signi • cantly reduce logistics costs for transportation of goods from Papua or the Molukkas.

Indonesia's most important port is Tanjung Priok in the

north of Jakarta, which handles roughly 65 per cent of the nation's maritime cargo. It possesses three terminals for containers and non-containerised freight, a berth length of 10,220 meters and an area of 179.41 hectares. Last year total container turnover at the port amounted to 5.7 million TEU. With capacity at this port now stretched, despite measures to optimise land and equipment, and in anticipation of further growth, a concept for NewPriok has emerged, the largest port project in Indonesia, designed to serve medium to long-term growth prospects of Jakarta as gateway to Indonesian trade.

Construction will be conducted in two phases utilising 392 hectares in North Jakarta. Channel dredging work and

reclamation started in 2013. Phase 1 comprises three container terminals and two product terminals, the •rst container terminal on a 32 hectares area built as deck-on-pile and the balance of phase 1 a 180 hectare reclamation. Initial dra • is 16 meters with a design depth of 20 meters that will accommodate triple-e class ships. Phase 2 will add a further four container terminals and can be developed once capacity in phase 1 has reached 70 per cent.

### More terminal capacity

NewPriok Container Terminal 1 (NPCT 1), scheduled for completion this year, will be operated by a consortium led by Mitsui partnering with PSA and NYK for a period of 25 years. When fully operational in 2023 the NewPriok Port (also known as Kalibaru Port) will more than triple the annual capacity of Tanjung Priok, which today is 7.5 million TEUs per year. IPC, Indonesia's largest port operator, plans to invest 2.47 billion dollars to realise this project.

On the Insel Batam, just a few kilometres from Singapore, IPC, in partnership with the Chinese Merchant Group, is also constructing new facilities for container handling, with an annual capacity of four million TEU. For the long term it is planned to up this to 15 - 20 million TEU. If large vessels are able to dock in Batam in future, Indonesia could become more interesting for direct calls from liner tra• c and thus become a competitor to Singapore.

A further major port project is a four billion dollar expansion of Jayapura in Papua. • e peninsula has extensive reserves of gas, oil and coal and the German company Ferrostaal GmbH intends to build a petrochemical complex here for two billion dollars.

### **IMPRINT**

### **IAPH Daily News**

is published daily during 29th World Ports Conference 2015 by DVV Media Group GmbH

**Editors** Frank Binder (resp.) Eckhard-Herbert Arndt, Claudia Behrend, Tim-Oliver Frische, Björn Helmke, Peter Kleinort, Ariane Wagner

**Translation** Michael T. Roberts

Design Andreas Gothsch

### Advertisements

Tilman Kummer +49-40-23714-0

**Distribution** Markus Kukuk

**Print** Albert Bauer Companies

Copyright 2015

DVV Media Group GmbH



The NewPriok Container Terminal in Tanjung Priok is almost complete. It is part of the first phase of port expansion. In future triple-e-class vessels can be served here

PHOTO: PRIOK PORT



Fuelling Germany's first LNG ship in Bremerhaven. The 94 meter long Borkum ferry "Ostfriesland" owned by AG Ems bunkers 40 cubic meters of LNG

## Progress with LNG projects

96 per cent expect a positive environmental impact

One of the studies presented at the IAPH Conference reveals that the maritime industry sees prospects for a reduced carbon footprint and lower operating costs in the medium term through use of LNG as a marine fuel.

Liqui • ed Natural Gas (LNG) as a fuel to power ships could reduce environmental pollution caused by shipping – and in the medium term also cut operating costs. In the short term, i.e. in the next 1-2 years, high initial investment is preventing the big breakthrough for LNG. • at is the result of a study by the EU initiative LNG for Shipping presented yesterday at the IAPH Conference.

• e consultant company PwC and the classi • cation agency DNV/GL interviewed 53 experts on behalf of the EU Commission on the pros and cons of LNG in the maritime economy. 96 per cent of respondents consider positive environmental aspects likely or highly likely, stated PwC manager Axel von Perfall. • is is due to lower particle emissions, fewer greenhouse gases and quieter ships.

Moreover, 76 per cent see a possibility for •nancial bene•ts in the form of reduced fuel costs in relation to other ships' fuels and lower maintenance and repair expenditure. Energy suppliers would like to be given a business opportunity through creation of an LNG infrastructure, but the

main obstacle to this at the moment, according to the 96 per cent, is the uncertain •nancial situation. Both ship and infrastructure operators are currently unsure if and when investment in machinery and the appropriate facilities would be worthwhile. • e second obstacle relates to the confusing situation regarding standards and regulations.

Nevertheless, successful pilot projects do exist. • ese are o • en sponsored by the EU or other institutions. Günter Eiermann from LNG supplier Bomin Linde pointed out that it has established an LNG fuelling service for ships in Stockholm and that in the Lithuanian port of Klaipeda a ship used to bunker and transport LNG will enter service in 2017. Furthermore, in Germany a second LNG powered ferry has just commenced operations between Cuxhaven and Helgoland. Hamburg too can boast its own LNG project: In summer the Becker Marine Systems 'power barge' will supply energy to AIDA cruise ships whilst in port. In winter it will help a company in the south of Hamburg generate power.



## More benefits for clean air

Port experts appeal for cooperation

A surprise had already been anticipated: In an electronic flash survey among the participants of the World Ports Conference, nearly 88 per cent favoured more regulation and legislation to protect the environment in ports. This was preceded by statements from Christine Loh, Under Secretary for the Environment of the Hong Kong Special Administrative Region Government, Gene Seroka, Executive Director of the Port of Los Angeles, Johan Röslin, CEO of Copenhagen Malmö Port and Alexander Porschke, President of Nature and Biodiversity Conservation Union (NABU).

In the subsequent panel discussion on "Clean Air in Ports Corporate Responsibility to the Business Challenge" a consensus among the four participants was quickly formed: More legislation - more communication - more cooperation of ports wolrdwide.

China and Hong Kong in particular are looking to ports in California and Europe for information on their experiences with environmental technologies. "• ese port locations are the world leaders with regard to environmental and sustainability strategies," Christine Loh said. "We are trying to get the appropriate impetus for our ports out of these examples." Loh announced that China will implement SECAs within the next •ve years. She appealed for international experiences to be shared in a much stronger way.



Johan Röstin, Christine Loh, Alexander Porschke and Gene Seroka

• e key issue in her point of view is how port authorities and terminal operators may be made familiar with environmental issues. For that reason the currently rather technical dialogue has to focus more on the environmental and social aspects of port-cooperation, supply chains and the needs of local residents.

Alexander Porschke agreed: "Although we are the most important environmental NGO in Hamburg, we are precisely only one voice among many others here to discuss the future of the port." Environmental organizations and NGOs also are in favour of economic success for the port, but this should align with environmental requirements.

"In order to work on enviromental solutions, people •rst have to understand the complexity of supply chains," Gene Seroka commented. He campaigned for a "B2E strategy" -Business-to-Employees: "One in every twelve jobs in Los Angeles is se•led in the port. • e measures we implement there for clean water and clean air have a direct e ect on the entire city.



## Smart solutions for Hamburg

Axel Mattern, CEO of HHM, praises "splendid IAPH"

"Our port is growing," remarked Jens Meier, Chairman of the Management Board Hamburg Port Authority (HPA), yesterday on the fringe of the Red Sofa talks. "• at means that the existing infrastructures in the limited port boundaries need to be intelligently and e. ciently used." With this statement the host of the 29th IAPH summed up precisely the point of discussion the Sofa Talks focused on.

"• ere's nothing we can do about the Port of Hamburg being where it is. But what we can do is optimise the port even more," added Axel Ma•ern, CEO of Hafen Hamburg Marketing, in words of support for the HPA chief. "• is is being done and we've heard how splendidly progress is being made at this world conference," praisedMa•ern.

• is point of view was con • rmed also by Ulrich Wrage, CEO of data specialist company Dakosy, in the Red Sofa Talk, stressing that Hamburg's Port Community System (PCS) "is one of the most advanced in the world, particularly with respect to intelligent work • ows. Otherwise, it would not be possible to turnover the 10 mil. TEU each year".

Further important smartport compo-



nents are the intelligent tra • c light systems presented by Hamburg chip manufacturer NXP, the HPA and Siemens, which aims to avoid truck congestions on roads in the Port of Hamburg.

Lars Reger, Chief Technical O• cer of the Automotive division at NXP, agreed when asked for his perspective by DVV sofa moderator Tim-Oliver Frische.

Meanwhile, Chief Harbour Master Jörg Pollmann, demanded during his stint on the Red Sofa: "What we absolutely need is for the Elbe to be deepened even more."

## AIDA boss demands 4th terminal

Hamburg should expand existing infrastructure for luxury liners

If Hamburg's port is to profit from rapid global growth in the cruise shipping segment it must act quickly to create further handling capacities for luxury liners.

"Hamburg is in desperate need of a fourth cruise terminal," said Michael Ungerer, President of AIDA Cruises and Chairman of the cruise association CLIA, on • ursday at the World Ports Conference. • e statement was made during a morning of talks and discussions devoted to the global development in cruise shipping.

Between 2014 and 2017 the capacity of German cruise shipping lines will increase by 42.9 per cent. By 2016 we are looking at reaching the two million mark and a further million guests can be added to that in the following three to four years," explained the manager.



The "AIDAdiva" passing St. Pauli-Landungsbrücken in the Port of Hamburg

PHOTO: AIDA CRUISES

But this will only be achieved if all the responsible parties begin to think about providing the necessary framework for it to become a reality. And they need to start thinking about it today because what we now have in 2015 will not be enough," Ungerer stressed. On 9th June the new Hamburg Cruise Center (CC 3) in Steinwerder will of•cially be brought into service

handling AIDA and MSC ships.

### Venice also growing rapidly

A further example of rapid growth was provided by Dr. Roberto Perocchio, Managing Director of Venezia Terminal Passeggeri from the world heritage city of Venice. In recent years the port has invested massively in its infrastructure. • e handling facilities are based on

the former historic facilities for handling goods, but have been subject to signi•cant modernisation to make them suitable for their new task. Perocchio announced that between 1997 and 2014 around 25 million passengers passed through Venice, 18 million of which were cruise ship guests. For the cruise business today Venice is the "Gateway to the eastern Mediterranean."

## New TUI-ship to be christened today

Former German olympic swimmer Franziska van Almsick is expected in Kiel today to christen the new luxury liner "Mein Schi• 4". • e 37 year-old will o• cially name the newcomer to the TUI Cruises •eet at an evening ceremony at the Ostseekai. • e 295 meter long and 36 meter wide cruise liner was built at the Meyer Turku Oy shipyard in Finland.

On 15 decks 1000 crew member will be at hand to wait and serve up to 2500 passengers. TUI Cruises will be bringing two further sister ships into service in the years 2016 and 2017.
• e new additions are the company's response to the sustained boom in cruise shipping.

## The importance of law for trade and ports

International standards for passenger ships need to be harmonized

Approximately 90 per cent of world trade is handled by maritime shipping. In order to regulate the manifold interests of states regarding the use of the high seas and coastal territorial waters the Law of the Seas came into being. In spite of numerous international agreements there are still specific aspects that remain unresolved.

How diverse and complex these are became apparent in the panel discussion on the subject "Ports and Global Trade - Legal Trends and Challenges" that took place on • ursday morning in the CCH.

A•er an overview of the role and history of the United Nations and statements on the work of the IAPH Legal Commi•ee, moderator Frans von Zoelen, CLO Port of Rotterdam Authority, requested conference guests to pose their questions.

Dr Geraldine Knatz, Professor of the Practice of Engineering and Policy at the University of Southern California, opened by addressing the issue of several tragic accidents involving passenger ships and asked what the International Maritime Organization (IMO) is seeking to implement. Michael Shewchuk, Legal O• cer at the Unit-

ed Nations replied that there is still a lot of work to be done, but the legal framework was basically in place. "Passenger Safety is discussed on an annual basis at the UN." Dr Christoph Hasche, Honorary Secretary General and Vice Chairman of the German Maritime Arbitration Association, adding that the IMO has already implemented the International Convention for Safety of Life at Sea (SOLAS) and the Athens Convention relating to Carriage of Passengers and their Luggage by Sea (PAL), and emphasized the importance of the classi •cation societies in harmonizing standards.



Impressions
Enthusiastic finale
IAPH praises HPA
Grand Gala Dinner



With a colourful and high-spirited closing ceremony, yesterday the 29th World Conference in Hamburg came to an end in the CCH. Prior to the final musical act of the evening by drummer group Yogi Yokus, chief organiser Sabine Stüben from the Hamburg Port Authority (HPA) and moderator Max Boodie said goodbye to the 950 guests. Stüben and her team were applauded by departing IAPH president Grant Gifillan. "It was one of the best conferences I've ever attended".













## Silver and Bronze for JadeWeserPort

Deepwater port commended for environment initiative and transport optimisation



Arrival of the "Merete Maersk" at JadeWeserPort (JWP) in Wilhelmshaven

PHOTO: SCHEER

All praise for Germany's only deepwater port in Wilhelmshaven: Yesterday, the facility was on the receiving end of two major prizes. IAPH President & Chief Executive Officer/Director Port Authority of New South Wales (Australia), Grant Gilfillan, handed the awards to Holger Banik, CEO of Lower Saxony Ports and JadeWeserPort Realisierungs GmbH & Co. KG.

• e 2015 Silver IAPH Environment Award honours the Langwarder Groden conversion scheme of a 140 hectare area, 79 belonging to JadeWeserPort Realisierungs GmbH & Co. KG. • e scheme set about developing a salt marsh by opening the summer dyke to expose the area to normal tidal in • uences and create conditions for a sustainable and regularly •ooded salt marsh. Work started on removing around 40,000 cubic meters of unsuitable earth from the main dyke in July 2012 and replenishing this with 185,000 cubic meters of clay for dyke reinforcement and ground cover. Construction of a concrete riprap provides clear demarcation from the salt marsh. On completion of this a further 503,000 cubic meters of clay was applied to reinforce the main dyke in line with latest scienti •c knowledge on coastal protection. • e project was •nished in autumn 2014 and is complemented by a •ve kilometer long circular trail for nature lovers in Langwarder Groden.

• is year's Bronze IAPH IT Award goes to the SMART SC joint project for sustained improvement of communication structures and port logistics. • e project aims to raise e• ciency of logistics in the container-related value-added chain for import/export by implementing universal eBusiness standards. In order to improve e• ciency of freight transport, handling and storage, all means of information, communication and transaction accompanying the •ow of goods will be harmonised and data, information and documents e• ciently exchanged between all parties involved. Special consideration is paid in this respect to small and midsize companies as well as public authorities.

"For the JadeWeserPort in Wilhelmshaven this means optimisation of tra• c to the container terminal and GVZ", Banik stresses. Speci•c bene•ts are:

- removal of bo•lenecks in the cargo handling terminals through selective control of tra• c to planned schedules
- avoidance of congestion on the access roads to the JWP terminals through advance parking space planning, intelligent tra• c guidance and enhanced scheduling of cargo handling activities
- more handling e• ciency though early provisioning of planning fundamentals and controlling truck arrivals and departures.



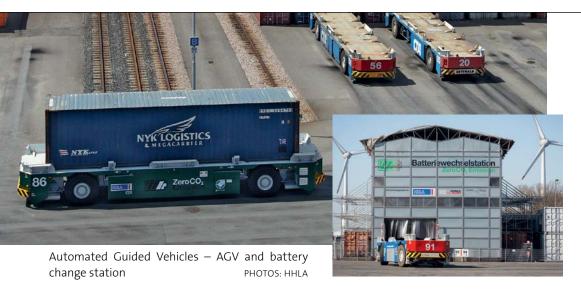
Grant Gilfillan (left) and Holger Banik with the bronze award PHOTO: HINRICH FRANCK

SMART SC was developed within the framework of the "eBusiness Standardisation in the Maritime Supply Chain" project sponsored by the Federal Ministry for Economy and Energy (BMWi), together with the Bremen Institute for Sea Transport and Logistics (ISL), dbh Logistics IT AG, aio IT for Logistics GmbH and the data processing company i2dm GmbH.

## Environment award for bremenports

An award also for the port management company bremenports GmbH at the IAPH Conference. Managing Director Robert Howe yesterday was pleased to receive the bronze medal for the "Port Environmental Award 2015".

- e prize was awarded for the ecological pilot project "LNG Hopper Barge", a 4.9 million euro work boat to be built by a Dutch shipyard in the second half of the year. Construction of the vessel represents a step in a new direction for bremenports' planners in their e•orts to reduce carbon dioxide emissions in the port.
- e hopper barge has a length of 70.5 meters and is the •rst of its kind worldwide to be powered by environment-friendly liqui•ed natural gas (LNG) and one of only approx. 65 vessels currently equipped to use this fuel. Construction of the LNG hopper barge is being supported by the European Commission, which is contributing 1.65 million euro.



# Less waste – Clean propulsion energy

HHLA looks to a sustainable future – Electromobility reduces emissions and improves the carbon footprint

The Port of Hamburg is the largest interconnected industrial area in Germany. Due to its proximity to the city centre, it bears special responsibility in matters of climate protection.

- e port's biggest container terminal operator, the Hamburger Hafen und Logistik AG (HHLA), is well aware of this responsibility. As early as 2008 it formulated the ambitious goal to reduce speci •c CO, emissions per container by 30 per cent by the year 2020. Already, far before this self-imposed deadline is reached, it is close to achieving this target. By the end of 2014 the HHLA had reduced emissions by 25.5 per cent.
- e HHLA's business model, for that ma • er, is thoroughly ecological. With the intermodal subsidiaries Metrans and Polzug, as well as its own •eet of trucks, the HHLA o ers customers a highly e • cient transport chain between seaport and European hinterland. • is is not only •nancially a • ractive, but also makes ecological sense, since large ships

and freight trains are by far the most environment-friendly means of transport for goods from places such as East Asia.

• e HHLA is improving its carbon footprint through numerous measures, one in particular being the switch from diesel to electricity and the use of electricity from renewable sources. An example is provided by the block storage cranes at the Burchardkai Container Terminal (CTB): Where several years ago transport was performed exclusively by diesel powered van carriers, now 24 electric cranes handle container placement and removal on a part area of the terminal. • is electri • cation reduces levels of CO, and other pollutants like sulphur, nitrogen and •ne dust particles, since the cranes at CTB and the Altenwerder Container Terminal (CTA) are powered exclusively by green electricity. • e same goes for the large container bridges at CTA, each of which moves 1.8 million tons of cargo a year.

A switch in energy focus is also taking place in the port. Development of the Automated Guided Vehicle (AGV) from diesel hydraulic to electro-powered container transporter represents a milestone here. Today, ten of the total 86 AGVs already run on green electricity from wind or solar energy, a clean achievement to be sure, these needing only 15 kilowa s of energy per operating hour. In comparison, their predecessors burned •ve times this amount. To date the vehicles have clocked up more than 700 000 emission-free kilometres and even drive autonomously for a ba • ery change, the clever thing being that they do so when green electricity hits peak supply in the grid. • is is the core of the so-called ,BESIC' program (,ba • ery driven heavy duty vehicles in intelligent container terminal operations') promoted by the Federal Ministry for Economy and Energy.

Van carriers (VC) too are becoming greener. • e greenest HHLA-VCs emit 94 per cent less nitrogen oxide and 95 per cent fewer •ne dust particles than their predecessors. How-

ever, not only goods transporters to the port terminals are electrically driven. More and more vehicles moving HHLA employees around the terminals are powered by electricity. At the Tollerort Container Terminal (C• ) more than 60 per cent of passenger journeys are accomplished by electro-powered Renault Kangoos. HHLA's car pool consists of 64 electric cars the biggest •eet of electric cars operated by any European port. Waste disposal is a further component of environmental protection. At CTB a new waste water treatment plant halves hazardous waste output by separating oil and other liquids from water used for cleaning van carriers. • is measure not only reduces pollutants but saves up to 90 per cent fresh water in the cleaning process,. Light emissions can also be a disturbance when the port is located near to the inner city, particularly when it operates round the clock. In the past, when the sites at Burchardkai and Altenwerder were completely •oodlit as a means to guarantee workers' safety, today large areas remain dark. "Our block storage cranes work fully automatically and need no light", says, HHLA sustainability commissioner Jan Hendrik Pietsch. • e lights can remain switched oo when no people are at work. • is is enabled by LED spotlights that can be switched on and o • faster than normal lights. • e conversion not only pleases the local population, but is part of the HHLA's sustainability strategy, a policy that pays substantial dividends. At the CTA alone 'on' time has been reduced by 88 per cent. "Earlier a lamp would be switched on for an average of twelve hours a day, now it is only 42 minutes", states Pietsch. at creates enormous savings of over 90 per cent in electricity consumption for lighting CTA block storage. For the two ter-

500 homes in a year.

minals this amounts to electric-

ity savings su• cient to power

# On a Voyage of Discovery in the Port of Hamburg

Hamburg Port Authority presents smartPORT projects in practice



The last conference day again offers a full and interesting agenda. After a week of top talks, intensive discussions and exclusive evening events the sightseeing tours around the Port of Hamburg guarantee an impressive finale. Conference guests have a choice of three different theme tours on which they can learn about the development of Germany's largest universal port on its way to becoming a smartPORT. The tours will visit projects and terminals both on land and water, all finishing by calling in at "Duckdalben", Hamburg's international seamen's club.

## From collecting information to displaying it



he bus tour will head for selected pilot projects in the port, explaining how these •t in with the smartPORT strategy. Participants will experience at •rst hand how tra • c and infrastructure data are collected and evaluated. One of the projects is an innovative intelligent parking solution that guarantees optimal utilisation of existing and new parking lots for trucks in the port. A further project showcased by the Hamburg Port Authority is the "smartROAD", which is currently being tested on a stretch to assess what can be achieved through rigorous implementa-

tion of information technology. • e objective is to automatically record and manage tra • c • ows on all strategic cross sections in the port's road network, with detectors precisely recording the current tra • c situation in each direction, the volume of vehicle emissions and wind direction. In a further step an intelligent light control system will be introduced. Currently DIVA signboards (electronic variable message signs) display tra • c information to drivers of heavy goods vehicles in real time, allowing them to take alternative routes in response to tra • c conditions.



## smartPORT Energy and Vessel Traffic Service (VTS) Centre

uests on the second sightseeing tour get to know Hamburg from the water. From the vantage point of a typical River Elbe barge ferry the journey traverses the port to the Vessel Tra• c Service Centre. On the way passengers are told about the smartPORT energy initiative and how this is realised in Hamburg. • e outstanding project to meet city climate goals will provide shore power for cruise ships, the new Altona power plant being unique in

Europe in its dimension. • e boat will then turn to pass a terminal that deploys a large •eet of electric cars, the power for which is generated by a solar plant installed on the roof of the adjacent building. Behind the Köhlbrand Bridge lies Altenwerder Container Terminal, one of the most modern in the world and operator of a •eet of automated guided vehicles (AGVs), which a •er successful •eld trials are now also ba • ery driven. Wind power is a further source of



low-cost green energy in the port. Terminal operator Eurogate was the •rst company in the port to commission its own wind powered generator in 2013. Continuing its journey, the boat's next stop is the VTS Centre, the Port of Hamburg's new, ultra-modern heart of navigation. • e building itself is a prime example of energy e• ciency. • e facility was reconstructed from January 2012 to June 2014 and the very latest state-of-theart technology installed.



## Shore Power for Cruise Ships

he third tour takes a good look at the way the port accommodates cruise ships and alternative concepts for supplying energy. This year Hamburg expects 160 visits from cruise ships. Two innovative projects for providing shore power to cruise ships will be presented, commencing with the Altona Cruise Ship Terminal, Europe's first onshore power supply for cruise ships at berth. Completion of the facility, which has an output of 12 megavolt ampere, is scheduled for summer 2015. The Free and Hanseatic City of Hamburg has invested 11 million euro in the project, 3.55 million of which were contributed by the European Union under the TEN-T programme. A frequency convertor is necessary to convert electricity from the 50 Hz from the grid to the 60 Hz on board ships. The combination of size and output makes the shore power facility in Altona unique in the world. Power is supplied to ships via a

flexible, automatic cable management system specifically developed for this station.

• e second external power project for cruise ships in the Port of Hamburg is located at the HafenCity cruise terminal. Here, the HPA has installed the landside infrastructure to have power supplied to vessels via an LNG hybrid barge, which generates electricity at up to 8 megavolt ampere by motors powered by LNG. It is the •rst power barge of its kind in the world.