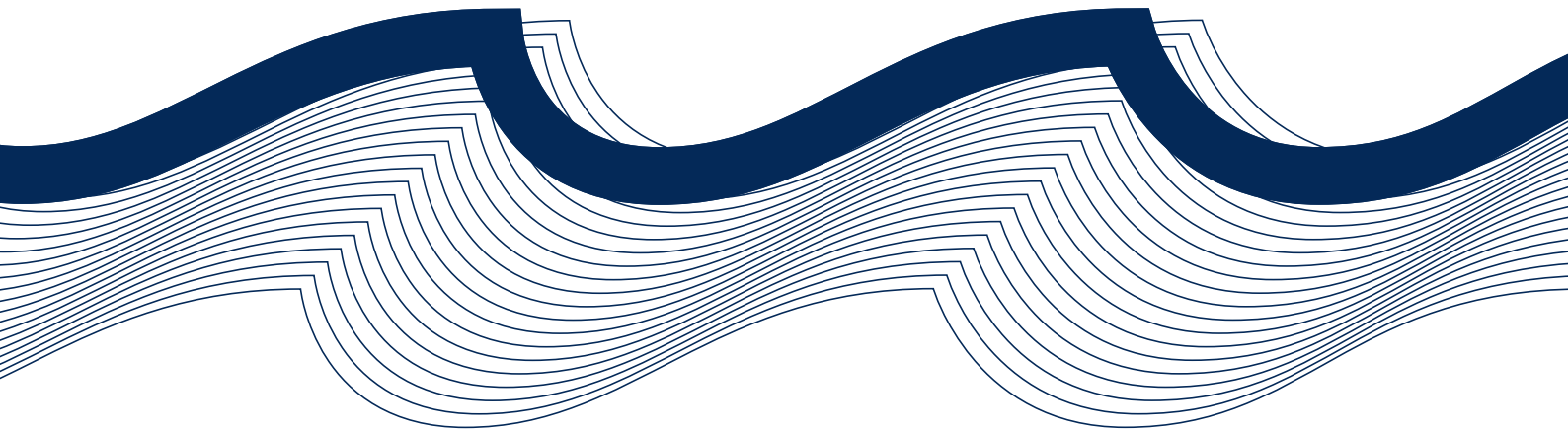


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MORE THAN JUST FIGURES

There are many ways to present a successful business year. You can print figures, data and facts, outline the projects that were completed and show the major steps on the way to the ultimate goal. However success is also in the eye of the beholder. And because of that, we not only present our results and figures, but tell the stories behind them, too, which is why, in our Annual Report, our partners and customers also have their say. After all, they are the ones who are very well acquainted with us and our work.

Last year we, together with our employees and cooperation partners, accomplished a lot. Be it the record result achieved by the port railway, infrastructure improvements or the introduction of true innovations – the examples are manifold. The following pages will tell you more.

The Annual Report of the HPA contains all the relevant performance indicators of 2010. However, it is not just figures, data and facts that reflect the success of a company. In order to realise a modern, future-oriented port management, the port not only has to deliver economic success, but just that little bit extra.



JENS MEIER
Chairman of the Management Board



WOLFGANG HURTIENNE
Managing Director



THE HPA

With a workforce of about 1,900 employees, the Hamburg Port Authority (HPA), a commercially oriented institution under public law, manages all duties related to the area of the port of Hamburg. Among these duties are port planning and port development, maintenance of the port infrastructure, guaranteeing the required fairway depths as well as ensuring the safety of navigation. The institution is in charge of 304 kilometres of rail tracks, 143 bridges, 132 kilometres of roadway and 49 kilometres of quay wall, as well as tunnels, locks and lighthouses.

The HPA offers its customers an all-purpose port, located 120 kilometres far in the inland, with competitive site advantages. It is the owner of most of the port land and leases it out to enterprises of the port industry on a long-term basis. When performing the duties, the management of the HPA takes care to strike a balance between ecology and economy. The port disposes of excellent hinterland connections, whereby the modal split share of cargo moved by rail and inland waterway carriers is growing.

49

kilometres of quay wall are managed by the HPA – that roughly equals the distance between Hamburg and Lübeck.

12000

ocean-going vessels call at the port annually.

304

kilometres of rail tracks are operated by the port railway – that is almost three times as long as the subway network operated by Hamburger Hochbahn.

150000

people in the metropolitan region of Hamburg work directly or indirectly for the port – that is almost the population size of Potsdam.

3

is the port of Hamburg's ranking among the European ports.

950

ports in 178 countries are connected through the port of Hamburg.

7200

hectares is the size of the port area, which corresponds to about one tenth of the total land area of Hamburg.

880

railway points are available to the Hamburg port railway.



[Duo at the top] Chairman of the Management Board Jens Meier has been in charge of the affairs of the port of Hamburg since April 2008. Before that, he was a member of the board of directors of a logistics company. Wolfgang Hurtienne joined the management board as the HPA's second chief executive in August 2009. Before he took over his new position, Mr Hurtienne was a member of the HPA's management board and in charge of the strategy division.

“DIVERSITY IS WHERE THE PORT OF HAMBURG EXCELS”

An interview with the HPA’s managing directors, Jens Meier and Wolfgang Hurtienne, about the development in 2010, challenges and the future orientation of the port.

Mr Meier, Mr Hurtienne, what were the most outstanding events for you at the HPA in 2010?

MEIER: One outstanding event for me was when the first new traffic sensors transmitted data on the current traffic situation in the port. Together with our partners, we laid the foundation for the technical interconnection of road-bound, rail-bound and seaborne traffic.

HURTIENNE: Outstanding for me was that Hamburg managed to win a spot on the sailing schedules of the large container ships of the new generation. That shows that ship owners trust the efficiency of the port of Hamburg and the HPA, however it also comes with the expectation that competitive terms of calling will soon be provided on a permanent basis.

In 2010, the HPA celebrated its fifth anniversary. Has the HPA grown up?

HURTIENNE: To use the same metaphor: we are still in the process of growing up. In many segments, we’ve already come very far; in other areas, we will certainly continue growing. However, one should bear in mind that we didn’t start from scratch. Our employees can look back on many



years of experience, we have experts in port issues working for us. So, as an organisation we may be young, but the know-how of our employees provides us with a good and solid basis for our new corporate structure.

MEIER: That's exactly what's so great about the HPA, but of course, it's also a huge challenge to all colleagues and us, too. Though we have outgrown our childhood days long ago, we still go through different development phases. Sometimes, progress is very fast and we are surprised at what all is working well already. Then there are times when we only take baby steps, and we have also gone through one or the other puberty phase.

After a difficult beginning, 2010 turned out to be quite good for the port. How satisfied are you with the past year?

HURTIENNE: In 2009 still, only a handful of people expected such a rapid handling volume recovery. Hamburg needed slightly longer to emerge from the recession, whereby one should not forget that the effects of the crisis were felt later here than at, for example, Antwerp. In any case, 2010 is the year the port of Hamburg left the crisis behind.

What lessons have you learnt from the crisis?

MEIER: We made use of the crisis and talked to our customers to learn about what they require of the port of the future. It turned out that the port of Hamburg's asset is its diversity. Even though container trade dominates, we strive to further strengthen Hamburg as a universal port with strong industries. The crisis has revealed how important it is to talk directly to market participants and recognise future demand.

HURTIENNE: The crisis once more showed that our port is as much affected by decisions taken in Beijing or Washington as by decisions made at Hamburg's town hall. We therefore monitor international developments more closely now.

Let's turn our focus to the inside. Where did you make adjustments and how did that turn out?

MEIER: One important decision was to continue all expansion projects despite the crisis and go ahead and plan for the future at unabated speed. We kept on investing in the port railway – once the port's biggest worry – and look what's become of it: a true top performer that sets new



“We now monitor international developments more closely”

records all the time. Large-scale construction projects such as the Niedermfelder bridges or the new Rethebrücke, a bascule bridge, continued in 2010 and we presented the plans for the new Kattwykbrücke, a railway bridge. At the same time, we refined the concepts to interlink the port technically.

Other European ports are expanding their handling capacities. What is Hamburg doing to stay competitive?

HURTIENNE: The port is located right in the heart of the city of Hamburg, and we can't simply reclaim coastal land to create new terminal areas. We therefore continue working on becoming yet more efficient and “grow to the inside”. In 2010, we took a great leap forward: we are now upgrading the infrastructure facilities at Burchardkai to ultimately expand capacities there to almost double the capacities of the Jade-Weser port; the procedure to obtain official approval for the proposed expansion to the west has been advanced and our plans for the Central Terminal Steinwerder have become more concrete. Don't forget that the port is more than just handling operations. It is home to countless enterprises that live off and with the port of Hamburg. It's also for them that we expand the port.



[With an eye on the port] If he can find the time, Jens Meier likes best riding his motorbike to the Bubendey banks on the southern side of the River Elbe. “Here, I can enjoy the quietness and watch the ships on the river at the same time. One glance and I know if the port is doing well.”

The Christophe Colomb was the first ship of that size to call at the port of Hamburg. What does that mean for the port of Hamburg and the future development?

MEIER: The trend to launch ever larger ships continues. When the Christophe Colomb called at the port of Hamburg, it was a big event. By the end of 2010, we had welcomed several container freighters of that size every week. We responded to that trend, for instance, by pursuing a novel approach when planning the new vessel traffic service centre. In cooperation with the University of Hamburg, our staff analysed all processes to create optimum conditions. 2010 also underscored the importance of the planned fairway adjustment for the future of the port of Hamburg.

The objectives on the agenda of the HPA are to strengthen both the industry and the port-based businesses. Is that not contradictory?

MEIER: It would be contradictory if the types of use excluded each other. The opposite is true, however. Let's take electro-mobility, for example: the automobile branch is one of Germany's key industries. Components are manufactured all over the globe and transhipped via the port of Hamburg, among others. This will be different in future, because new drives such as, for instance, electric motors will change the sector. If we manage early on to establish the port of Hamburg not only as a transshipment site, but also as a storage and processing site for batteries, for example, all parties involved will benefit.

HURTIENNE: What is important is to attract and bind cargo to Hamburg. If certain products are processed in Hamburg or form part of an integrated production chain here, this cargo will not be lost to us in times of crisis.

The HPA aspires to be a promoter of innovations in eco-friendliness, safety and IT integration. Keyword eco-friendliness – how does that agree with the industry based in the port?

HURTIENNE: Let me give you an example: Both the port railway and port road management staff are working on new IT systems to shorten waiting times. Every minute a truck driver is not stuck in a jam benefits the environment as well as their companies, and the port's efficiency performance improves.

MEIER: Sustainability has meanwhile become a criterion

for competitiveness. More and more companies are mindful of the carbon footprint of their logistics chains. We want the port of Hamburg to set standards here.

How do you create an innovative culture in a big institution with a tradition to maintain?

HURTIENNE: We don't have to specially create it, but we need to foster and cultivate it. The various divisions of the institution are indeed quite open towards new technologies and innovative approaches, and that applies to all of the HPA's departments. What we will now increase are our efforts to encourage all staff to contribute their ideas and feedback.

What are the most significant milestones planned for 2011?

MEIER: In 2011, we will continue to walk the path taken. If in 2010 priority was given to infrastructure expansion, we will now focus on increasing the efficiency on existing roads and rail tracks. The concepts to technically interlink the port, which we prepared for all three modes of transport, will gradually be put into practice. Being the year of the environment, 2011 will be marked by "sustainability" and that applies to the port, too.

HURTIENNE: In 2011, we will also actively advance the port development plan which, following the new formation of the Hamburg Senate, is currently being reviewed. Workshops will be held specifically involve all parties engaged in port development.



[Home port Hamburg] For Wolfgang Hurtienne, the south entrance to the Elbtunnel offers one of the most beautiful views of the port: "Here, shortly before you disappear into the earth, you have one of the most magnificent views of the biggest ships in the world, more than 100 kilometre in the inland. My family knows: when we return home via the south, we absolutely have to make this detour."



WOLFGANG FELDMANN [INVENTOR OF THE GEOTHERMAL RAILWAY POINT HEATING AT PINTSCH ABEN GEOTHERM GMBH]

»Together with the port railway we managed to develop, test and optimise a prototype of the geothermal railway point heating, which required some courage and willingness to experiment on the part of the HPA. It shows that the institution has the long-term development in mind and thinks of the environment as otherwise it would not have entertained the implementation of such an idea.«

SUCCESS THROUGHOUT

In 2010, the Hamburg port railway achieved a record high: never before did it move more containers by rail, and never before did it transport more freight. The record figures also underline the importance of the port of Hamburg and its port railway for the whole of Germany, because internationally operating companies in particular increasingly rely on the services of the port railway. A success story.

Like ghosts the wagons move on the tracks, separate and roll on, until they finally come to a stop on one of the 32 rail sidings. Only the clacking of the points indicates that it's not ghosts that are having a good time at the "Alte Süderelbe" railway yard, but state-of-the-art technology: from the fifth floor of the tower, reminiscent of an air traffic control tower, track planners control the points and direct the wagons to their correct spots. Even the braking and stopping of the freight trains is PC-monitored.

The heavily loaded wagons stop on track eight of Europe's largest seaport railway yard. Their freight: bogies manufactured by Siemens in Graz. From Hamburg, a ship will take them to China, where they will be built into passenger trains.

The port of Hamburg and the affiliated port railway are immensely important for an internationally operating company such as Siemens: "Almost 80 per cent of our total transport volume goes via the port of Hamburg," says Padideh Moini Gützkow, in charge of Mobility Consulting

at Siemens. "We try to use the railway whenever possible. Sometimes we send off drives, sometimes electronic components and in particular, we depend on the port railway to process the goods smoothly and fast. Not only does that save us money, but the environment benefits, too."

Record: 40 million tonnes of cargo

Like Siemens, more and more companies are using the railway to transport their goods to or from the port of Hamburg. Roughly 11 per cent of the total volumes moved by rail in Germany departs from or ends there and the tendency is upward. The record result in 2010 is impressive proof: for the first time in the port railway's 145-year history, more than 40 million tonnes of port cargo were carried by trains – a full 18 per cent rise over the last year. The port railway hit a new record in 2010, not only in absolute quantities, but in container volumes, too: 1.93 million TEU travelled its tracks. Among others, trains carried coffee or fruit, as well as ores, cars, harvesters or – in the case of Siemens – components for trains or medical devices.

40.1

million tonnes of goods were moved by the port railway in 2010 – that's 4,000 times the weight of the Eiffel Tower.



Bavaria, too, needs the port of Hamburg

The port of Hamburg and its port railway serve all of Germany: approximately one third of the goods arriving in Hamburg by ship are transported on by the port railway to South Germany and the Alpine regions, as well as to the Czech Republic and Poland. In 2010, Hesse alone moved double as many standard containers (TEU) by rail from and to the port of Hamburg than last year. No one tops Bavaria, though – it sent more goods by trains operated by the port railway than any other customer.

“The port railway is the backbone of our port”

The course that eventually led to the record result was set in 2008 and 2009 already when railway yards and the track network were modernised: the HPA refurbished 56 kilometres of the over 300-kilometre long port railway network and upgraded 130 railway points. Since 2008, it has invested a total of EUR 125 million in railway facilities. “That is paying off now,” says the HPA’s managing director Jens Meier. “The port railway is the backbone of our port. We have to ensure that the port-based logistics companies have unimpeded rail access to the terminals.”

Geothermal railway point heating – a pilot project

In order to guarantee the above, the HPA does not shy away from treading unusual paths: directly in front of the police station in Rossdamm, it installed a worldwide unique system: a railway point heating that operates exclusively with geothermal heat without the need for any external energy supply. Currently, several hundred points in the port area are heated with electric heating elements or, if there is

ice or snow, with gas burners to prevent them from freezing. That costs a lot of energy. “Our conventional point heating devices in use at the 630 points in the port consume as much electricity as 800 households,” explains Harald Kreft, head of the port railway. “The idea of heating points without external power supply is of tremendous interest to us.”

Wolfgang Feldmann had worked on his environmentally friendly heating for ten years until he, in conjunction with Pintsch Aben geotherm GmbH, a railway technology manufacturer, handed the prototype over to the port railway for testing in its network in the winter of 2010: “While the harsh winter caused a lot of problems to rail traffic in general, our point heated with geothermal energy worked really well,” says inventor Feldmann proudly, “and all that without electricity, maintenance and complicated technology.” Another decisive advantage: in contrast to conventional point heating devices, the geothermal heating can also be deployed in areas subject to flooding.

Fit to face the future

It is not only ideas such as Wolfgang Feldmann’s that cause the HPA to look ahead optimistically. The cargo turnover forecast for the port of Hamburg predicts two-digit growth rates in rail traffic, too. Until 2017/18, instead of the 200 freight trains that arrive at the railway yards daily today, around 400 trains will use the tracks, which are set to become the transport routes of the future. Jens Meier is ready to launch the modernisation programme any time, because he knows: investing is worth it.



DR PADIDEH MOINI GÜTZKOW | INDUSTRY SECTOR MOBILITY DIVISION COMPLETE TRANSPORTATION MOBILITY CONSULTING, SIEMENS AG |

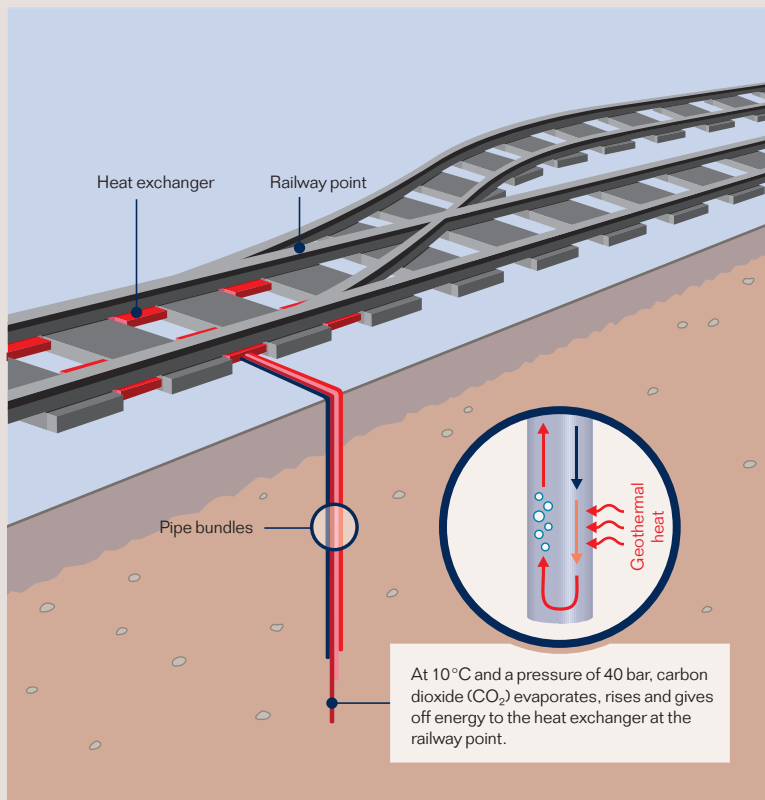
»By 2015, Siemens’s transport volumes are expected to have increased by 30 per cent. We take every effort to switch to environmentally friendly modes of transport. By using the railway, we reduce our CO₂ emissions and actually save costs.«

Perfect point: in front of the police station in Rossdamm, HPA employees, under the tutelage of inventor Wolfgang Feldmann, are working on the world's first geothermal railway point heating.



Geothermal railway point heating – a pilot project

Simply ingenious: geothermal heat instead of electricity and complicated technology



Like a probe, two pipe bundles with all in all 18 single pipes reach about 50 metres deep into the ground and form a closed circuit there. Due to the heat of the sun, the soil in North Germany remains frost-free from a depth of one metre even if temperatures go below zero and the topsoil is frozen. The soil below a depth of ten metres will always be much warmer.

The railway point heating exploits the temperature difference between the topsoil and the deeper soil: The working fluid is carbon dioxide that circulates in the pipes at a high pressure and about 10 °C. The liquid gas extracts energy from the surrounding ground in the hot zone, evaporates and rises to the cold zone, where it gives off the energy to the heat exchanger at the point and melts the ice and snow there. Here, in the cold zone, the gas condenses again, flows down to the hot zone on the inside wall of the pipe and the circuit starts anew. The geothermal heating operates completely CO₂-neutral and does not require external pumps and control.



[Time flies] The Hamburg port railway started operations on 10 August 1866 with a 700-metre long two-track quay train. Today, the rail network in the port of Hamburg comprises over 300 kilometres of track. As the HPA's own railway infrastructure company, the port railway is the link between the terminals and the German and European railway networks.



FRANK HORCH [MINISTER FOR ECONOMIC AFFAIRS OF THE FREE AND HANSEATIC CITY OF HAMBURG]

»The construction of the Central Terminal Steinwerder (CTS) is a huge opportunity for Hamburg and the entire metropolitan region to reinforce our port's position in international competition. This is an outstanding project which helps us to structure the port and prepare it to cope with challenges well into the future, generate added value and create additional jobs. The future use of the site is based on close market orientation so as to develop the CTS in line with demand.«

THE PORT OF THE FUTURE

The construction of the new Central Terminal Steinwerder (CTS) is a large-scale project that will demand a lot from the HPA over the coming years. In the next decade, the 125-hectare large site will be transformed into a state-of-the-art, highly efficient terminal. But how do you plan and make optimum use of the port of the future? That's the task of a seven-strong planning team for who 2010 was a year of visions, ideas and discussions.

Lunch break: of the biscuits in the conference room, only crumbs are left. The morning of the strategy workshop at the HPA's premises flew by. Numerous experts discussed the options for the use of the planned Central Terminal Steinwerder. Workshop leader, Iris Scheel, sips her coffee, quite satisfied with the outcome: "This workshop is one of many elements of this project that all have one ultimate goal: to create the perfect port of the future." As the project manager, the engineer is responsible for the development and design of the 125-hectare large site located at Mittlerer Freihafen. In conjunction with her team, she has



125

hectares is the size of the site of the planned Central Terminal Steinwerder – an area as large as 175 football fields.



been working on the project since 2008. Ideally, besides handling operators, various future-oriented branches are to be settled there that benefit from the site's closeness to the water and land transport connections.

Industry screenings and tips from colleagues

"We verify different concepts and also see beyond Hamburg's water boundaries," says Jörg Jocker. He is in charge of business development at the HPA and is also involved in the planning. Talks held with other terminal operators, ship owners, enterprises, international manufacturers and logistics companies inspire new ideas, so to find out how markets tick and what they will demand in the future. The activities of other ports are also watched closely. Rotterdam, for example, is building a brand-new terminal, however without having to convert old areas. "The various projects may not be 100 per cent alike, but the exchange of experiences with our colleagues at, for instance, Bremerhaven or Rotterdam still is extremely valuable," says Jocker.

Trend watching

Which branches will still be economically attractive after 2020? How can a port make a difference and stay competitive among its peers? In their search for answers, CTS project manager Iris Scheel and her colleagues travelled around the globe. "For instance, within the scope of other missions we went to Shanghai to have a look at the deep-sea port of Yangshan, and in Israel, we toured the electric car manufacturer Better Place. We wanted to understand the flow of goods and identify the up-

coming growth industries," explains Iris Scheel. Electric cars are a promising future option, as are renewable energies, wind and biomass. A global analysis commissioned by the HPA and performed by McKinsey, a consultancy, confirms: e-mobility, logistics, light assembly or offshore wind energy are the global trends. "It is therefore vital for us to gain a foothold in such future markets at an early stage," emphasises Scheel.

One option: electro-mobility

The electro-mobility sector could become a key model: parts of production chains could be located at the universal port of Hamburg and thus bind companies to the port. Cargo loyalty is the key to success here: "If one step of the production process takes place here in the port of Hamburg, guaranteed cargo volumes will safeguard jobs," elaborates Iris Scheel. Manufacturers, too, will benefit from synergies: transport routes from the quay edge are short, the railway and roads are just around the corner. In the worldwide economic crisis, in particular, the HPA had to learn the hard way how fast cargo is lost to other ports. Production facilities however cannot relocate as easily. All this has to be considered when planning the CTS if Hamburg, as one of Europe's leading ports, is to stay competitive internationally in the future, too.

Gathering ideas by consulting the market

In order to find out what exactly the market requires from a terminal of the future, the HPA entered new territory and very successfully so: it launched a market consultation process as early as 2009 and invited companies from



HEINRICH-B. ROSSBACH [PROJECT MANAGER, MARITIME DIVISION, ROYAL HASKONING]

»Professionalism, commitment and creativity characterise the HPA's team management, represented in particular by project manager Iris Scheel. Qualities such as these made the successful and internationally unique market analysis process so outstanding.«

Port development

Evolution of quay wall construction through the ages



The quay walls at Steinwerder still feature traditional construction techniques known as finger-pier structure. Back then, ships could not load as much cargo as they can today. Quay walls were long and narrow because only little storage space was required. Today, increasingly large ships carry considerably more cargo into the port, which is why the demand for storage space behind quay walls is huge.

all over the world to develop and submit possible concepts for the use of the CTS site. In March 2010, an independent jury awarded the best proposals. The concept for a CO₂-neutral terminal submitted by the British-Dutch enterprise, Royal Haskoning, came in first, but the other concepts submitted also contain a multitude of ideas that will be considered when it comes to determining the final use of the site. What most concepts had in common were ideas for a sustainable, eco-friendly terminal because the HPA puts a lot of emphasis on a low carbon footprint and resource conservation.

Constructional measures required

Until the ideas can be implemented however, a lot of reconstruction work still needs to be carried out. In the office of Ulrich Schmekel, the technical project manager, sketches and drawings of the future CTS site abound. "The next step is to obtain official approval for the planned construction measures from the competent authority," says Schmekel. On top, an environmental impact assessment will be performed to analyse the effects on the environment.

Daring to think big

Once the authorities give the go-ahead, the real challenge will begin: 1,800 metres of new quay wall will have to be built, 20 hectares of land area will have to be reconverted and a total of 14 million cubic metres of sand will be needed to fill in a 60-hectare large port basin to create land. A construction site of this magnitude is new ground even for the experienced project manager Schmekel. But he is optimistic: "If we can't do it, who can? The HPA has decades-long experience in the construction of terminals – that's what we are good at."

The team around Iris Scheel has a bit of time left to fine-tune their visions for the port; the first plots of land are planned to be handed over to the operators from 2020 onward. When that happens, the port of the future will finally and truly have arrived in the present.



[A lot to do] Since 2005, the HPA has been working on the development of the Central Terminal Steinwerder, and since 2008, the project has been managed by Iris Scheel, a qualified engineer. The seven-strong core team consists of a business management graduate and six construction engineers, among them three women. Over the next years, a lot more people will join the team: "We will certainly need many more hands in the implementation phase," says project manager Scheel.



HANS STAPELFELDT [PARTNER AND DIRECTOR OF STAPELFELDT TRANSPORT GMBH]

» Hamburg's new DIVA* system is the first step towards improved traffic conditions in the port. If a customs office is full, if there is a traffic accident, if a terminal shuts down – we hauliers need such data to be able to avoid getting stuck in jams. The HPA's traffic information system will supply such information in future – a huge gain for our entire industry, but also for the many private commuters.«

SEAMLESS FLOW

No matter whether traffic accident, construction site or high traffic volumes: drivers in the area of the port of Hamburg will, in future know immediately how they can get where they need to go in the fastest time. How so? DIVA* will help them. The new IT-supported road information system supplies important traffic news to road users in real time. All data collected to provide such information are handled by Bernd Jurrat at the HPA's port road management centre. We'll give you a look behind the scenes of his high-tech control centre.

A truck broke down on one of the major bridges, the Köhlbrandbrücke. Traffic is coming to a standstill and motorists on the main port thoroughfare are facing long tailbacks. Bernd Jurrat knows what's happening long before the radio traffic service does. The traffic engineer works on the sixth floor of Speicher T right in the centre of Hamburg's historic Speicherstadt (warehouse city). From the HPA's recently established port road management centre, he surveys traffic in the port of Hamburg. Highly concentrated he monitors changes in road traffic patterns, calls up different camera settings and matches data. "The traffic disruption is now displayed on the variable message signs at Veddeler Damm and at other interchanges in the port area. "Based on this real-time information, the vehicle drivers affected have a chance to respond to traffic conditions and select alternative routes. And the police are on their way, too," he explains. The old and the new millennium could hardly unite in a more fascinating way than they do at his workplace: the outside of the 19th century, brick-red merchant-office building is heritage-protected, whereas inside you will find digital information technology of the

21st century. Four screens and a room-dominating large screen document traffic flows. Every accident on the port's major roads, every inoperative traffic light, every jam, every road block at the movable bridges, every incident no matter how small, is registered here.

Digital traffic information

The new IT-supported road information system called "DIVA"* makes sure of that. The divine name stands for "dynamic traffic volume information system" – a system which the HPA has introduced to keep traffic moving in the port area. The institution has been working on the project since 2009. When the chance opened up to be granted funds within the scope of the federal stimulus programme II, the HPA grabbed it, and preparations to implement the digital traffic information system of the future have been at full swing ever since. After the installation of huge LED signboards throughout the port area and the establishment of countless measuring points at strategically relevant traffic hubs in 2010, the new system started pilot operations in June 2011 providing drivers with information about up-to-

*Dynamische Information zum Verkehrs-Aufkommen im Hafen
(dynamic traffic volume information system)

33000

vehicles travel the main port thoroughfare daily, 36 per cent of it is heavy-duty truck traffic.



date traffic conditions: "The system displays disruptions, waiting times and alternative routes in real time," explains Jurrat. "This way, we hope to significantly increase efficiency on existing roads."

Expensive congestion

It's high time for DIVA* to take up work: traffic loads in the port of Hamburg and on the approach roads are heavy. On the major port thoroughfare alone, every day 12,000 trucks transport goods from the quay edge to the hinterland or deliver containers to the port. Right now, all are facing the same problem. "If the radio warns motorists about a jam, most of the time the driver is already in the midst of it," complains Hans Stapelfeldt, operator of one of the city's longest-standing hauliers. His vehicles use the port routes five to ten times a day to ferry sea containers to the north German hinterland. If traffic comes to a halt, it can be expensive. "If my 30 trucks are all stuck in a traffic jam at the same time, it not only costs me EUR 1,500 per hour but a lot of nerves, too," declares the haulier.

Preventing congestion, protecting the environment

The new traffic management system of the HPA is going to change that. DIVA* will inform road users about traffic patterns in the port early on, via the internet or on the 16 variable message signs installed throughout the port, to give drivers sufficient time to select the best alternative route in the event of disruptions. "That way, traffic will distribute a lot more evenly within the road network," says Jurrat. Jams are minimised, waiting times reduced. For the environment DIVA* is a blessing as well, because smooth

traffic flows have a positive impact on fuel consumption and reduce pollutant concentrations in the air.

Always up to date with DIVA*

The four by four metre big variable message signs along the major port access roads are the pride and joy of DIVA* project manager, Sascha Westermann: "They are fitted with more LED elements than any other traffic message sign deployed in the world," beams the engineer. The high-resolution signboards depict the strategic road network in the port and indicate where exactly disruptions are occurring. "They are mainly geared toward drivers familiar with the port environment. Roughly 90 per cent of all road users travel through the port daily. In addition, text messages provide concrete information about disruptions that drivers may expect ahead of them. The system will respond lightning-fast to congestion issues or accidents in the port," promises Westermann. 300 inductive traffic loops and 160 sensors installed at bridges and pillars accurately register traffic volumes in the port: the number and type of vehicles as well as their speed. "An integrated measuring system even allows us to determine the weight of each truck crossing the Köhlbrandbrücke so to be able to better assess the bridge's lifespan."

DIVA* is going independent

In addition, the HPA deploys state-of-the-art Bluetooth and video technology: Bluetooth sensors determine the travelling times of vehicles in the port area; video cameras record the traffic density and send their high-resolution images directly to the traffic control centres of the police.



MARKUS FRIEDRICH | PROFESSOR AT THE FACULTY OF TRANSPORT PLANNING AND TRANSPORT TECHNOLOGY, UNIVERSITY OF STUTTGART – THE TRAFFIC EXPERT WAS INVOLVED IN PLANNING AND IMPLEMENTING DIVA* |

» Ensuring sufficient mobility for the population as well as fast transport of goods and merchandise is an indispensable prerequisite for the economic development of Hamburg as a business site. With the introduction of the new port road management system the HPA promotes improved utilisation of existing transport infrastructures and mobilises reserve capacities.«



DIVA* warns road users before they get stuck in a traffic jam – such as these truck drivers on the Köhlbrandbrücke. All data on traffic volumes on the port's roads are transmitted to the HPA's port road management centre. Recommendations on what the signs are to display are generated automatically and supplemented by information about, for instance, recent accidents.

All this is subject to strict data protection regulations; personal data are not captured. The encrypted data are transmitted via fibre optic cables to the computer centre and on to the control centre. "You can't respond to accidents and jams faster than that," so Westermann. At the moment, Jurrat and his colleagues at the port road management centre still verify if the important information is instantaneously displayed on the message signs and available on the internet. After successful completion of the pilot phase, the system is to operate automatically from the autumn onwards.

Green wave in the port

Informing road users via LED display signs is only a first step. The HPA's long-term aim is to provide drivers with individualised information. "One option is to equip truck drivers who frequently travel the port area with a smartphone and transmit personalised data and route recommendations to it. A possible message may be: If you slow down to 33 kilometres per hour, the next traffic light will be green," says Westermann, looking ahead into the future. Shorter waiting times, lower fuel consumption, reduced pollution and less noise: a glance at the LED display fed by DIVA* is already worth it. Bernd Jurrat at Speicher T wishes everyone a good trip.



[Intelligent traffic lights thanks to DIVA*] In 2012, an adaptive network control system will be installed along the major port thoroughfare. The signal programmes of the individual traffic lights will then be switched automatically in line with traffic volumes. Traffic on the main port thoroughfare will then flow even more smoothly.

*Dynamische Information zum Verkehrs-Aufkommen im Hafen
(dynamic traffic volume information system)



REINHARD PESCHEL | MANAGING DIRECTOR OF THE GERMAN OFFICE OF CMA CGM |

» We consciously decided to use ships such as the Christophe Colomb to call at Hamburg. The hinterland connections are excellent there and we benefit from the top-class service provided by the HPA. The port is very well prepared to handle our 13,830-TEU vessels: the harbour master's office plans everything perfectly and the harbour pilots know exactly what to expect and what to do. Due to the smooth collaboration berthing times at the terminals are rather short.«

PREMIERE FOR CMA CGM CHRISTOPHE COLOMB

When, in the summer of 2010, the Christophe Colomb called at the port of Hamburg for the first time, another new era started. The 13,830-TEU giant container vessel owned by the French shipping company CMA CGM is the largest ship ever to have docked at the Hanseatic City. Thanks to the very meticulous preparations, the premiere was a resounding success – and clear evidence that trade was picking up again.

July 13, 2010 is a very special moment in the career of harbour master Jörg Pollmann – even though he will be on holiday with his family on that day. “They would have thrown me out of the house had I cancelled the long-planned family holiday just to meet Christophe Colomb,” he grins. Pollmann is referring to the ship of the French shipping company, CMA CGM, that has been named after the man who discovered America and which is moving into the port of Hamburg on that particular Tuesday evening with the attitude of a king. The sun was shining, the sky was blue. Even the wind, so it appears, is holding its breath, blowing gently as if to sweeten the premiere: ideal conditions for the largest container vessel ever to have moored in the Hanseatic City’s port.

The powerful tugboat that has accompanied the vessel since it crossed the state boundary looked like a toy boat next to this leviathan of the seas. Little wonder it is: at a length of 365.50 metres and a beam of 51.20 metres, the Christophe Colomb is as long as Berlin’s TV tower is high. “The ship is so big that, when you stand on the bridge, you can’t see the water to the left or right of the vessel when moving up the Elbe,” says harbour pilot Eckart Wilharm.

According to him, the special challenge is to correctly assess the distance to the river banks or the quay edge. That is why two experienced pilots have joined Captain Pierre Gilles Coat on his bridge to assist him when the ship enters the port.

Unobstructed view thanks to new construction

At 7 p.m., the ship passes the ship greeting point at Willkomm-Höft to the sound of the Marseillaise, admired by hundreds of curious onlookers who want to see the colossus with their own eyes. A whopping eight layers of containers can be stacked on top of each other on deck, a further eleven layers can be stored below deck: a total of 13,830 standard container units (TEU). However, the Christophe Colomb does not carry that many containers on its journey into Hamburg as the Elbe fairway is not deep enough for the ship’s fully loaded draught. It mainly transports consumer goods from South-East Asia to Hamburg, where it collects machine parts, recycling material and mixed cargo. Because of the vessel’s modern construction, Captain Pierre Gilles Coat has an excellent view across the sea of containers on board. In contrast to the

825

exceptionally large ships with a length of over 330 metres called at the port of Hamburg in 2010 – 17 per cent more than in the previous year.



type of vessels common until now, its navigation bridge is located at the very front of the ship, 180 metres away from the engine room and the ship's funnel.

Ship simulator rides

Slowly the giant freighter moves up the Elbe towards the berth at the Container Terminal Burchardkai. However before it can dock there, it has to perform a 90-degree turn near the Waltershof port area and go backwards the rest of the way. A nautically demanding manoeuvre – after all, the ship is longer than three football fields: “When we pull the Colomb from the Elbe backwards into Parkhafen, it behaves like a lock gate that is square to the stream,” explains Eckart Wilharm. “The vessel is subject to enormous forces and there is a risk that it starts drifting.” That is one of the reasons why that situation was repeatedly practised in the ship simulator. The harbour pilots, the staff of the vessel traffic service centre and the harbour master's office jointly developed a manoeuvring strategy based on which all 75 pilots of the harbour pilots' association have rehearsed every last detail of the Christophe Colomb's entry into the port in the ship simulator at the Marine Training Centre in Hamburg-Stellingen. “This training is extremely important for us because we gain a lot of experience in the simulator, such as how the ship moves in extreme situations,” so Wilharm.

“The service in the port of Hamburg is top-class”

Thanks to the assistance of the tugboat crew and the harbour pilots the turning manoeuvre proceeds smoothly. At 9 p.m., it is safely tied up at the sparkling new berth for

large ships at Burchardkai. Here, five gantry cranes, currently the most efficient and powerful available in the Elbe port, are waiting to unload the boxes. Each of them can simultaneously lift four 20' or two 40' containers – a total of 120 tonnes. That's a record – and a huge gain in productivity. All that convinced the French shipping company, and since August 2010, CMA CGM has been dispatching one of their ocean giants to Hamburg every Friday. “The service at the port of Hamburg is top-notch,” praises Peschel. “What we need now and fast is the Elbe fairway adjustment so that large freight ships such as the Christophe Colomb or the Magellan can call Hamburg at economically favourable terms.” Harbour master Jörg Pollmann, too, knows: the future of his port depends a lot on this measure. If the decision to adjust the fairway is announced in 2011, he will not go on holiday.



Very demanding: the turning manoeuvre of the Christophe Colomb

[Gargantuan dimensions] At a length of 365.50 metres and a beam of 51.20 metres, a draught of maximally 15.50 metres and a carrying capacity of 13,830 standard containers (TEU), the CMA CGM-owned Christophe Colomb counts among the largest container ships in the world. Its first call at the port of Hamburg in July 2010 was a milestone – today the arrival of such ships is part of daily routine.



“Standstill is our natural enemy”

An interview with harbour master, Jörg Pollmann, on the future prospects of the port of Hamburg

Mr Pollmann, you are in charge of shipping traffic in the port. What are the challenges you face?

Ships' sizes are rapidly increasing, but our water areas remain the same: In the past four years, the number of giant vessels with a length of over 330 metres calling at the port of Hamburg more than doubled. What 30 years ago was considered a colossus today looks like the rescue boat of a 13,000-TEU container giant – a fact that poses quite a challenge to the staff at the vessel traffic service centre. In order to ensure that these giants can navigate the River Elbe and the port at all, we are forced to constantly optimise the technical and local conditions. Standstill is our natural enemy.

Along with ship sizes the demand for safe and fast handling in the port increases. How do you intend to guarantee both in the future?

We dispose of one of the technically most advanced traffic control systems in the world. To use the existing resources in the port yet more effectively, we are developing the IT-supported information system called PRISE (Port River Information System Elbe) in conjunction with the quay operators, the harbour pilots and the boatmen. The system is to provide information on the respective production status of all parties involved: Will the quay operators finish unloading the ship on time? Are there sufficient pilots and tugboats available? Is the process control in place? The earlier all participants know where there is a hiccup, the faster a solution to the problem can be found – without impeding other processes. Simultaneously, we are improving our radar and transponder system to obtain

ever more precise data on the exact location of individual ships in the port and on the River Elbe. Together with the University of Hamburg, we analysed how work processes at the vessel traffic service centre could be improved.

What will the vessel traffic service centre of the future look like?

We first had to determine how to display all the information on the monitors in a clear and neat way to enable our staff to instantaneously extract the most important data. One possibility would be to install an interactive video wall in addition to our monitors which shows a large-scale map of the entire port, including ships' movements. But we also came up with rather simple suggestions: the coffee kitchen shouldn't be too far away from the radio equipment.

How important is the Elbe fairway adjustment for the future of the port of Hamburg?

Based on the current draught and width restrictions, a vessel such as the CMA CGM Christophe Colomb can only call at Hamburg within a very narrow time frame, and on top, it cannot fully utilise its carrying capacities. In the long run, ship owners will not accept such terms. We will only stay competitive if we can guarantee, on a long-term basis, that large vessels can call at the port of Hamburg not only safely, but at economically favourable terms, too. For this kind of ships, one metre of draught translates into 11,000 tonnes of additional cargo – that equals the total carrying capacity of the famous Cap San Diego museum ship. The widening of the Elbe is of similar importance because only then can big ships pass each other on the river. A one-way route is not an option.

What do you answer the critics?

I am convinced that we can adjust the fairway safely and that the dyke's safety can also be guaranteed. That would be in my own interest, too: I live right behind the dyke in the Altes Land area and I wouldn't be too fond of finding myself and my family up to our necks deep in water. Of utmost importance, however, is that there'll be no negative impacts on the environment and that adequate measures will be taken to prevent that. It is not for nothing that the plans mention in detail how plants and animals can best be protected.



[Well navigated] The experienced navigators at the vessel traffic service centre at Seemannshöft in Hamburg-Waltershof control and survey all ship movements in the port – a total of 30,000 annually. They work in close cooperation with the harbour pilots, advise the shipmasters on navigation routes and coordinate the berths.

THE VIEW ONTO THE WATER IS INCLUDED

The total area of the port of Hamburg covers 7,200 hectares. That equals the size of a small town. A large portion of this area is under the administration of the HPA. A challenge for the staff on the team in charge of land and real property management: they take care of the development and management of sites and real property, manage approximately 800 lease and tenancy agreements – and they don't mind lending a hand when a company is relocating.



NIELS UNGER | MANAGING DIRECTOR OF VOPAK DUPEG TERMINAL HAMBURG GMBH |

»Vopak's relocation was a logistical and planning challenge. The continuous consultation between the partners is the key to success. Together with the HPA, we were able to find professional solutions to difficult tasks, too.«

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hectares is the size of the total land area of the port. That equals an area as large as the airports of Hamburg, Munich and Frankfurt combined.



Relocations of any type require precise planning. In the case of Vopak the removal activities took a whole three years. That's no wonder: the world's largest fuel depot operator did not have to transport removal crates from the Waltershof port area to the new site at Neuhof, but huge oil tanks – a total of 20, whereby the largest ones were 22 metres high and 450 tonnes heavy. "That's more than double the weight of the Statue of Liberty," explains Vopak's managing director, Niels Unger. "To relocate them we ordered a special floating crane from the Netherlands." The relocation of number 152 and a further two giant tanks was particularly spectacular: they were ferried on the River Elbe to Vopak's new terminal site, one of Germany's largest handling sites of the mineral oil industry. Another challenge the managing director of the petroleum port faced was to minimise the impact of the relocation on daily operations, a fact that made the planning phase even more important. "For three years, we had been preparing this large-scale project in close collaboration with the HPA. The actual relocation was completed within five months. In March 2011, the last of the tanks arrived at its new home," summarises a happy Unger.

Real property management from A to Z

The HPA's expert for questions around removals is Uwe Weidemann, who is in charge of the relocation and settlement of new companies in the area of the port of Hamburg, among others. "We basically work like real property agents," so Weidemann. "We offer land, develop it and guarantee functioning infrastructure facilities such as water and power supply lines." The HPA looks after the needs of

about 800 tenants, among them container and tank terminal operators, industrial facility operators or logistics companies. Some companies have been doing business in the port for over 30 years already.

A new home in the port of Hamburg

The port of Hamburg is attractive to new companies, too. In September 2010, for instance, Bernd Wittorf, sales manager of Rolls-Royce Marine Germany, turned the first sod at Reiherstieg in Hamburg-Wilhelmsburg for the construction of the new German head office of Rolls-Royce Marine, on a site covering 4,391 square metres. The global leader in ship technology and engine systems had closed two branch offices to build the ultra-modern, EUR 6 million service centre in the port of Hamburg; 70 people will work there.

The HPA – the architect of the future

To ensure that the port is continuously able to accommodate future demand, the HPA also ventures into new territory: in 2010, DB Schenker, a transport and logistics company wholly owned by Deutsche Bahn AG, the German federal railway, requested the HPA to construct a tenant-specific building – a first for the institution. State-of-the-art energy standards were observed to save costs and resources. The employees work in shifts around the clock and the showers are seldom turned off. Instead of using the heating system to heat the water, solar plants have taken over the job, saving up to EUR 7,000 in electricity charges per year, and the annual carbon footprint is reduced by roughly 11,000 kilogrammes. The HPA invested EUR 2 million – the view onto the water is complimentary.



BERND WITTORF [GENERAL SALES MANAGER ROLLS-ROYCE MARINE DEUTSCHLAND GMBH]

» Germany is an important market for ship technology, and Hamburg is located right at the centre of this maritime cluster. Our new site in Reiherstieg allows us to offer improved maintenance and refurbishment services. We are highly satisfied with our decision to invest in Hamburg. «

A WORLD IN ITS OWN RIGHT

In order to ensure that all runs smoothly in Europe's third-largest seaport, the HPA performs a plethora of tasks and is active in many places, both for the port-based industry and Hamburg's citizens. Much of it goes far beyond what is commonly associated with a port. One of the special services provided by the HPA is to support the water police in technically maintaining their fleet.



The Hamburg water police and the HPA interact almost daily to maintain the fleet and ensure the safety in the port of Hamburg.

PETER HUSMANN [CHIEF POLICE INSPECTOR AT THE WATER POLICE IN HAMBURG]

» For seven years now, I have been in charge of maintaining and upgrading our fleet, among others. I collaborate with the colleagues at the Hamburg Port Authority almost every day. I can reach them at any time and, compared with other companies, their shipyard is qualified, competent and reliable.«

In a port of global importance, ships' propellers move a bit faster. Work never stops, workers unload cargo at any time and every minute is filled with a different activity. The HPA, too, is on the go around the clock, no matter the season. Around 1,900 employees have just one aim: to keep everything flowing smoothly in and around the port. In the winter of 2010, they kept the waterways navigable with heavy-duty ice-breaking boats on 48 freezing-cold days. At the end of 2010, they built the cycle bridge at Klütjenfeld so that cyclists can now pedal from Wilhelmsburg all the way to the St. Pauli-Elbtunnel with the port in view throughout the tour. To make sure that there are lots of ships to admire, the HPA takes care that water depths are adequate. Surveying services and dredging ensure that the access to the port is always deep enough to leave at least one hand's width of water beneath the ships' bottoms: the daily tasks of the HPA are manifold.

A world in its own right

In addition to the above, the HPA keeps the Elbe beach at Övelgönne clean in the summer, operates the heritage-protected St. Pauli-Elbtunnel and provides comprehensive information on flood defence. It is a world of its own that the HPA takes care of, expands and constantly refurbishes, among others 147 bridges, 140 kilometres of roadway, 55 kilometres of quay wall as well as tunnels, locks and lighthouses, and the list goes on and on.

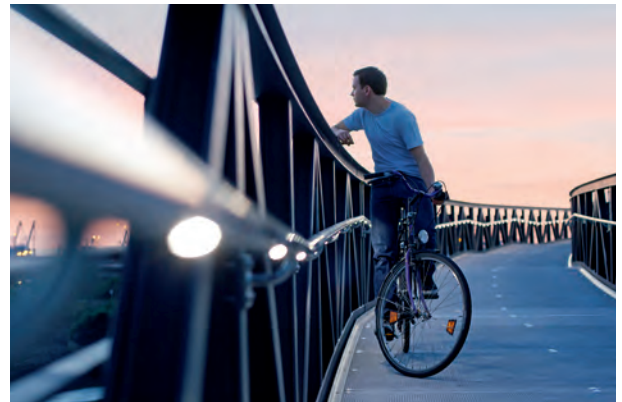
A very demanding job

Supporting the Hamburg water police (WSP) also counts among the HPA's duties. Approximately 550 police officers and 31 boats ensure the safety not only in the port of Hamburg, but also on the Lower and Middle Elbe and the German coastal waters. Chief police inspector Peter Husmann is the head of the department of watercrafts and public rescue equipment and as such, he is also in charge of maintaining and upgrading the WSP fleet, which comprises two coastal patrol boats, one Alster patrol boat, eight port patrol boats, six emergency and rescue boats, and 14 disaster protection boats. In 2005, an agreement was entered into that governs the business relationship between the police and the HPA. Experts are on call around the clock to carry out maintenance work and emergency repairs, as well as to provide technical assistance to the police fleet.

apprentices in nine professions were under the employ of the HPA in 2010. Every year, the HPA offers roughly 25 apprenticeships.



Not an easy job: the HPA's icebreakers prevent ice from jamming up, secure the dykes and facilitate shipping in the port.



The cycle bridge at Klütjenfeld was inaugurated in December 2010: the cycle bridge and road bridge now run in parallel, which enhances traffic safety even further.

[Truly diverse] To keep Europe's third-largest port going, a multi-skilled team is required. The 1,900 employees of the HPA are at home in the most diverse of professions, with almost one third of the workforce being craftsmen, among them joiners, painters, bricklayers, locksmiths, lathe operators and track workers. Engineers, architects, physicists or gardeners are as much responsible for the port's operations as are the navigators, seamen and shipmasters.

Quay wall construction – infrastructure designed in line with the times

At Sandtorkai, you will find the oldest quay wall in Hamburg: built in 1866, it still fulfils its purpose in the harbour city. Right next to it, the HPA's specialists take care of the future: they work on research and development projects to optimise quay wall construction because, like in former times, quay wall design still plays a vital role in the development of the port. The investigations focus on the load-bearing properties of the mighty quay wall constructions and low-noise construction methods. The HPA experts also produced a special, very efficient quay wall cross-section, called the "Hamburg solution" that other ports have copied: the slightly offset main quay wall with fender piles placed in front offers static and constructive advantages that increase stability, lifespan and cost-effectiveness. As a side effect, the resulting buffer between ship and sheet pile wall facilitates the docking process, and the HPA's customers, the port industry and shipowners know how to appreciate this advantage.

The HPA implements the research results straight into practice. One such example is the quay at Burchardkai, Hamburg's biggest and, at the same time, oldest quay facility, whose quay walls stem from the 60s: in order to meet the requirements of the new generation of container ships and bear the loads of modern gantry cranes, around 1,450 metres of state-of-the-art quay wall are under construction there.



Quay wall construction at Burchardkai

ON A JOURNEY OF DISCOVERY

Tradition and inventiveness mark the history of the port of Hamburg: Hamburg's position today as one of Europe's most important seaports is due to an increasingly interconnected port industry, on the one hand, and the continuous technological progress, on the other hand. Traditional port business and the innovation principle still walk hand in hand, whereby the HPA not only invests in its own research projects, but it also supports unusual pilot projects away from the quay edge, which lead the way for other, port-unrelated industries.

PROF. DR.-ING. JÜRGEN GRABE [TECHNICAL UNIVERSITY OF
HAMBURG-HARBURG, TUHH]

»Progress starts with research because only new insights will pave the way into the future. That is why the HPA has been working closely with us for more than ten years now. Our study results are immensely important for day-to-day operations at the port.«

Tarmac recycling – using old to make new

Trucks are roaring through Pollhornweg in the Wilhelmsburg port area. None of the drivers notice that they are steering their multi-tonne vehicle on a test route. On 500 metres of road, a pilot project was launched in September 2010: within the scope of a public road construction project, the tarmac used for the surface layer was almost 100 per cent recycled – a first in the Federal Republic of Germany. A new recycling procedure made that possible: the old road surface material is milled out layer by layer and then treated in an asphalt recycler. An additive combination of wax and oil, produced from recycled waste oils, is added to rejuvenate the aged and hardened bitumen and replace the components the bitumen lost over the years on the road due to chemical reactions. "Because of the heavy-duty truck traffic, the tarmac in the port of Hamburg is subject to excessive wear," knows asphalt technologist Gerhard Riebesehl. Nevertheless, the inventor of the innovative recycling technology is sure that the test route in Pollhornweg will pass with flying colours: "The new surface is at least as durable as the original surface and on top, it is less expensive," says the managing director of Storimpex Asphalttec. True enough, the new treatment procedure saves up to 30 per cent of asphalt costs. "This is a definite advantage considering the fact that the weight of trucks rises constantly, which means that road surfaces must withstand ever higher loads and thus need to be replaced more often," explains construction engineer Willi Stegemann, the head of road facility management at the HPA.

Apart from the HPA, as the principal of the construction project, and Storimpex, the State Ministry of Urban Development and Environment, that monitors the study and evaluates the results, is involved in the pilot project in Pollhornweg. If the outcome is successful, in the long term other road surfaces are planned to be recycled with the new technology – not only in the area of the port, but on other roads in need of repair in the Hanseatic City, too.

Asbestos clean-up – to protect people and the environment

Bridges, jetties, pontoons and locks – they all combine to lend the port of Hamburg its charm. Their maintenance, however, poses a special challenge to the staff of the HPA's port infrastructure division because some of the anti-corrosion coatings of these buildings contain asbestos. When restoring the sometimes very small and uneven surfaces of such buildings, employees must be adequately protected against exposure to asbestos and take care that no asbestos fibres are released into the environment. To ensure that, GP Innovation and the HPA came up with a solution: the asbestos vacuum cleaner. The extremely efficient industrial vacuum cleaner sucks a hood on the surface to be cleaned by applying low pressure. Once low pressure is present, a granule mixture is used to gradually remove surface layers. The removed material is safely collected in a receptacle. "It is solutions such as these – developed with company-internal know-how to meet the demands of day-to-day business – which the HPA benefits from," says project manager Hans-Werner Ratjens. "It makes us independent, pools the specialist knowledge of the staff and shows that innovation is worth it – for the environment and financially, too. The asbestos vacuum cleaning procedure has meanwhile been officially approved and certified, and it is very sought-after. Ratjens's team has entered the contest for the award "German Occupational Safety and Health 2011".



Asbestos clean-up with a vacuum cleaner

GERHARD RIEBESEHL [MANAGING DIRECTOR OF STORIMPEX ASPHALTEC GMBH]

»Our roads are virtual raw material treasure troves. The joint task of the administration and the industries should always be to find new ways to refurbish roads in line with resource conservation and environmental protection.«

DR.-ING. JÜRGEN WOLF [IN CHARGE OF QUALITY MANAGEMENT AT GP INNOVATION GMBH]

»Asbestos clean-up is a complicated task. We had to work out completely new solutions for our patented procedure to meet occupational and environmental safety regulations. Assisted by the HPA, we were able to resolve the issue.«

“GREEN LIGHT ALL THE WAY FOR THE PORT OF HAMBURG”



THOMAS STRAUBHAAR

Dr. Thomas Straubhaar was born in Switzerland in 1957. He completed his macroeconomic studies in Bern and California's Berkeley. In 1983, he gained his doctoral degree and four years later, he was promoted to the rank of professor. Straubhaar has taught at the University of Hamburg since 1999, and in 2005, the economist took over the helm at the Hamburgische Welt-Wirtschaftsinstitut (Hamburg Institute of International Economics – HWWI) located in the city district of Rotherbaum.

Professor Straubhaar, during the economic crisis international trade dropped, in part severely. Is the crisis over now?

After the global downturn in 2009, world trade has picked up again in 2010: trading activities this year reached pre-crisis levels and there is no doubt that the trend points upward. The port of Hamburg in particular will get green light all the way.

What are the lessons the crisis has taught business and politics?

Above all, we must bear in mind that our economic system is subject to strong fluctuations, which occur at irregular intervals and which cannot always be predicted. Be it upswing, boom, recession or depression, the anatomy of fluctuations is based on the fact that today's markets are closely intertwined at an international level. A crisis or an upswing in a particular economic area may also have repercussions on others – including the side effects that go along with it. Players on the economic stage are more or less forced to become more flexible.

The European shipping companies and the port industry in particular had to struggle with overcapacities during the crisis – how are they supposed to act “more flexibly”?

In order to prevent building large overcapacities in the first place, as it was common prior to the crisis, it is advisable to avoid “following the crowd” blindly and instead think of expansion in cycles and downturns. We need to adapt our logistics systems to the vagaries of business as best as possible by standardising and simplifying processes and increasing modularisation. We will then be able to respond to economic shocks faster and adjust capacities more easily.

Which mega-trends will bring us future growth?

The world population and, along with it, the demand for goods will continue to rise strongly. Most of the people living in threshold countries are poor, yet they want to have their share in what we consider the standard of living in the north-western hemisphere. That desire improves the work performance in these countries and consequently the purchasing power of the masses, which in turn promotes a further opening of the markets: not only will more coun-

25

million standard containers (TEU) are predicted to be moved through the port of Hamburg by 2025.



tries as independent parties be included in consumption, but increasingly so in global production and trade, too.

What effect will that have on the global flows of goods?

In the long term, the world's eastern and southern regions will emerge as the most important trade routes and Europe's share in global trade will decline. That, however, is nothing dramatic if we put our emphasis on quality rather than quantity, both in the transatlantic trade and in our trade with the East and the South; in other words: refinement instead of mass production.

How will that look like in practice?

We have long been surpassed in the global scramble for cheap mass production. We need to enhance the value of our products, meaning that we have to maintain our technological leadership in various branches, i.e. manufacture goods and deliver services that are based on special value-adding processes and which are of superior quality.

Which chances do you think does that offer for the future development of the port of Hamburg?

As to the metropolitan region of Hamburg, we believe that, apart from handling operators, more industrial businesses will settle here. They can process their products in the vicinity of the port, which saves them costly on-transport, and then ship their goods all over the world from here.

Rotterdam, Antwerp, Genoa, etc. – how competitive are the other ports?

Hamburg faces a myriad of competitors who, over the coming years, will compete more fiercely for ship owners to load and unload their ships in their ports. By 2020,

container terminal capacities in the entire North Range will have increased to about 86 million TEU. Compared to 2008, that is an increase of 68.2 per cent.

How can the port of Hamburg maintain its position?

The decisive criterion will be how fast and how intelligent loading and unloading takes place, i.e.: How fully automated and precise does the container terminal operate? How long are individual containers parked at the port edge? How fast can containers be identified and transported off? How is transshipment organised? Here, Hamburg is already very well placed, but competition is only partly in the hands of the port itself. It is also about how goods are distributed in the hinterland by rail or by road and how close to the port processing plants and intermediate agents or buyers are located.

What do you think has to be done here to cater to the developments described above?

Besides the deepening of the Elbe river channel, transport connections will have to be improved. One important project is the Hafenuerspanne, a cross-port route that directly connects the port to the motorways (autobahn) A7 and A1. Furthermore, the port railway needs to be linked more comprehensively to the federal railway network. And the third vital project is the construction of the Y-route, which is supposed to move traffic away from existing roads and facilitate on-transport. Unless the concept of port co-operations hampers the expansion of the infrastructure, the projects above will also serve to strengthen the competitiveness of the port of Hamburg.

How can these large-scale projects be followed through?

Sustainable funding is required. More sponsors and financial backers must be won: from the city state of Hamburg to private business as well as foreign investors. I believe the federal government has to play a special role here because the port of Hamburg is not just about the local metropolitan region, but a "needle's eye" for Germany as an industrial site.



[The Hamburgische WeltWirtschaftsinstitut (HWWI)]

The HWWI was founded in Hamburg in 2005 as an independent research institute. The Hamburg Chamber of Commerce and the University of Hamburg are joint shareholders of the institute that specialises in the analysis of economic and socio-economic trends relevant to economic policy. The institute teaches economic science and promotes the further qualification of junior scientific staff. www.hwwi.org

The 2010 Financial Year of the Hamburg Port Authority

1774

active employees
worked for
the HPA in 2010.

2333.7

million euros in revenues were gener-
ated by the HPA in 2010.

121

million tonnes of cargo were moved through
the port of Hamburg in 2010.

686.2

million euros was
the equity of the
HPA in 2010.

5.19

per cent was the
labour turnover of
the HPA.

132.5

million euros were
invested in total by the
HPA in 2010.

60

More than 60 per cent of the total
containers handled in Hamburg
came from the Asian region.

Supervisory Board's Report

After the sharp drop in economic activities worldwide in 2009, 2010 saw a significant recovery of global trade, with optimism returning in particular in the course of the second half of the year. According to recently published figures, the German economy currently is in excellent health, showing solid growth rates. In 2010, Germany's gross domestic product increased by 3.5 per cent over the previous year.

Whereas in 2009 handling volumes had plummeted, 2010 was the year of recovery for the port of Hamburg. Trade, in particular the all-important container trade, picked up considerably. The number of containers moved through the port rose by 12.7 per cent to 7.9 million TEU. The total volume of cargo handled in 2010 stood at 121 million tonnes which, compared to last year, is an increase of approximately 10 per cent. Shipping traffic to and from East Asia climbed to a share of 42.5 per cent, whereby the share of trade with the remaining Asian regions in total volumes handled rose to over 60 per cent. In 2010, the port of Hamburg thus benefited significantly from the strong upturn in Asia's economies, in particular China's. When comparing the North Range ports of Antwerp, Rotterdam, the Bremen ports and Hamburg, Antwerp was the clear winner with a 16 per cent increase in turnover rates, which is mainly due to the competitive price policy pursued by the terminals there. At 24.4 per cent, Hamburg's market share in container trade within the North Range remained almost unchanged when compared to the previous year.

First volume statistics for 2011 indicate that the port of Hamburg continues to grow steadily. Seaborne cargo trade increased by 10.9 per cent compared to last year. In April, Hamburg's break bulk segment achieved the best result so far after the crisis started two and a half years ago. All in all, business in the port of Hamburg is in line with the general upward trend of the German economy.

The supervisory board supports the management of the HPA in its intense efforts to prepare the port of Hamburg to face the challenges ahead and take the appropriate measures to handle this expected rise in economic activities. Apart from the comprehensive refurbishment and optimisation programme already in place, and the promotion of strategic expansion projects, securing the future financing position of the Hamburg Port Authority to manage these public-sector duties is a key objective.

The current financing structure of the Hamburg Port Authority is such that, like in the previous year, the funds available to deliver public services are not sufficient. The supervisory board will continue to make every effort to ensure that the public budget provides for sufficient funds to secure the provision of such services in the coming years.

Management monitoring and control, advising the managing directors

The HPA AöR's supervisory board monitored the management board in the 2010 financial year and advised the management board on management issues. The supervisory board received regular, updated and comprehensive information on the state of affairs and the going concern of the institution in the form of written and oral reports.

In the 2010 financial year, four supervisory board meetings were held, one resolution was adopted in writing and four meetings of the financial committee formed by the supervisory board took place. In particular, the financial committee reviewed in detail the financial issues submitted by the management board and presented the results and recommendations at the supervisory board meetings.

Financial statements as of 31 December 2010

The auditors appointed at the supervisory board meeting on 1 October 2010, Deloitte & Touche GmbH, audited the HPA's financial statements as of 31 December 2010 and issued the auditors' opinion expressing their full and complete approval.

In its meeting on 23 June 2011, the supervisory board reviewed in detail and verified the financial statements as of 31 December 2010, the directors' report and the proposal on the allocation of the result for the year. The members of the supervisory board were presented the documents pertaining to the financial statements and the auditors' report on time.

The representatives of the auditing company, Deloitte & Touche GmbH, participated in the advisory talks on the financial statements held during the supervisory board meeting on 23 June 2011, and explained in detail the main findings of their audit.

Changes in the composition of the supervisory board and management board

In accordance with the resolution passed on 7 September 2010, the senate commission in charge of public institutions farewellled Staatsrat a. D. [State Secretary, retired], Dr Robert Heller, and appointed Staatsrat Dr Michael Voges to the supervisory board of the Hamburg Port Authority for the remaining tenure of office.

In accordance with the resolution passed on 30 November 2010, the senate commission in charge of public institutions farewellled Senator a. D., Axel Gedaschko, and appointed Mr Hermann Ebel to the supervisory board of the Hamburg Port Authority for the remaining tenure of office.

On 1 October 2010, Senator Ian K. Karan was elected chairman of the supervisory board.

The supervisory board would like to extend their thanks to Senator a. D., Axel Gedaschko, and Staatsrat a. D., Dr Robert Heller, for their contribution during their time as members of the supervisory board of the Hamburg Port Authority.

The supervisory board would like to thank all employees and the management board of the Hamburg Port Authority for their continued commitment and professionalism. The board very much appreciates their support and assistance shown in the previous financial year.

Hamburg, 23 June 2011

The Supervisory Board

Chairman of the Supervisory Board

Directors' Report 2010 of the Hamburg Port Authority, Anstalt des öffentlichen Rechts [Institution under Public Law], Hamburg

1. Outline Conditions and Course of Business

The global economy is picking up again

After the sharp downturn in global trade in 2009, trade in many parts in the world experienced a quick recovery in 2010. While most of the forecasts sounded rather sceptical at the beginning, optimism returned in the second half of the year. Whereas the threshold countries in particular continued to grow strongly, many industrial countries regained their old strength and are now back on track and set to achieve pre-crisis trade levels soon. In 2010, Germany's gross national product rose by 3.5 per cent compared with the previous year. As one of the economies with the highest growth rates, the People's Republic of China – the port of Hamburg's most important trading partner – continued to perform strongly, recording an increase in the gross national product of 10.3 per cent. The economies in the eastern European region steadily recovered, with Russia and Poland in particular achieving high growth rates of 4 per cent and 3.5 per cent, respectively.

Substantial rise in handling rates in the port of Hamburg

The huge decline in cargo volumes moved through the port in the crisis year of 2009 are history now, with turnover rates recovering considerably in 2010. Container throughput, a vital aspect of the port's economy, rose by over 12 per cent. Conventional break bulk trade grew by a good 5 per cent; in the bulk cargo segment strong growth in grab goods volumes made up for the slight decline in the suction and liquid goods segment, so that all in all, total trade recorded a significant increase of about 10 per cent. Total cargo turnover in 2010 stood at 121 million tonnes, which roughly equals an increase of about 10 per cent over the previous year.

Hamburg's container throughput rates, measured in TEU, rose by 12.7 per cent compared with the previous year and amounted to 7.9 million TEU. Trade with the ports in East Asia in particular contributed substantially to rising handling volumes. In 2010, traffic to and from this area rose by a good 0.5 million TEU when compared to the previous year, which corresponds to an increase of over 18 per cent. Shipping traffic to and from East Asia climbed to 42.5 per cent of total container trade in the port of Hamburg. Add on to that the remaining Asian regions and the share of trade with Asia rose to over 60 per cent in overall container volumes handled in Hamburg. Thus, in 2010 too, the port of Hamburg benefited substantially from the strong performance of Asia's economies – in particular the People's Republic of China's – and remains Europe's most important port in maritime trade with the Far East. Other shipping areas that have a great share in Hamburg's transshipment volumes are Scandinavia and eastern Europe. The proportion of traffic to and from Europe is almost 27 per cent of the total volume of containers moved through the port of Hamburg.

Combined, the North Range ports of Antwerp, Rotterdam, the Bremen ports and Hamburg handled a total of 34.8 million TEU in 2010. In Rotterdam, container trade in the year under review rose by about 14 per cent to 11.1 million TEU. Bremen's ports achieved an increase in handling volumes of 6.5 per cent to 4.9 million TEU. Antwerp handled 8.5 million TEU – a jump of 16 per cent – which made it the port with the highest growth rate within the North Range. This is mostly due to the competitive price policy pursued by the terminals at Antwerp, which enabled the port of Antwerp to attract significant quantities of transshipment cargo. At 24.4 per cent, Hamburg's market share in container trade within the North Range remained more or less unchanged compared with the previous year.

Further development of the new financing system of the Hamburg Port Authority, Anstalt des öffentlichen Rechts, by implementing the Bestellerprinzip [principle according to which a politically responsible committee/competent authority orders the services of a company] applicable to port-unrelated tasks

The new financing system introduced in 2009 continued to be applied in 2010. General infrastructure projects were funded by allocations to capital reserves in 2010, too. This financing model again resulted in a balance sheet deficit of EUR 106.9 million. In particular, the loss was due to non-capitalisable project tasks, which were not offset by income but by the appropriation of capital directly to equity. In 2010, the HPA managed to secure additional funds from the Free and Hanseatic City of Hamburg for port-unrelated tasks based on the so-called Bestellerprinzip. For 2011 and the subsequent years, it may be assumed that the financing of these task bundles will stabilise as more funds have been accounted for in the draft budget of the Free and Hanseatic City of Hamburg. The introduction of the Bestellerprinzip is a first step towards improving the financing and earnings situation of the Hamburg Port Authority. More steps will be required to ensure that the business model of the Hamburg Port Authority is sustainable in the long term.

The course is set

Although business in the port recovered substantially in 2010 compared with the previous year, the Hamburg Port Authority is still facing a multitude of challenges. The impact of the global economic and financial crisis has led to changes in many parts of the port. Competition between the European North Sea ports has intensified. While in the past the market was large enough to offer a fair share to all parties involved, ports now have to fight for cargo. Not only does that require the intelligent and timely provision of handling capacities, but topics such as market positioning, hinterland connections and cargo loyalty need to be addressed full-scale. Charging cutting-edge handling fees in the port of Hamburg plays a pivotal role in being able to successfully compete for loading volumes with the other North Range ports, such as, for example, Rotterdam or Antwerp. The demand for land within the port area will also become more flexible in the future. Here, the Hamburg Port Authority needs to be able to offer land to attract to and keep profitable business in the port of Hamburg. On top of this, the productive use of port land guaranteeing high creation of added value is an important aspect of refinancing port infrastructure investments.

In 2010, the Hamburg Port Authority worked extensively on the port development plan and submitted a draft, which the Hamburg Senate released for involvement of the associations. The plan outlines the strategic framework conditions for the development of the port of Hamburg until 2015. The basis for the planning is an analysis of the future cargo handling potential commissioned by the Hamburg Port Authority. According to the analysis, container trade will continue to be the segment with the highest development potential, which is why any future port development strategy will focus on it. The market potential predicted to be handled annually in the port of Hamburg by 2025 is 25 million TEU. Decisions on future investments in the port's infrastructure will be based on that figure. In order to fully open up this handling potential, the Hamburg Port Authority has identified a number of factors considered decisive for the success of the port.

One crucial measure to realise the predicted turnover potential in the port of Hamburg will be the expansion of the port's infrastructure. Among the various investment projects, the quay wall extensions at the Waltershof port area, Altenwerder and Steinwerder are worth mentioning in particular. In addition, capacity improvement plans in the area of the Waltershof port and the Central Terminal Steinwerder could be advanced considerably. While the expansion project at the Waltershof port area has been submitted for approval, the diverse use options regarding the Central Terminal Steinwerder site have become more concrete with the completion of the international market consultation process.

The port needs efficient transport routes

Apart from adjusting cargo handling capacities to meet future demand, establishing efficient transport routes is a key objective of the Hamburg Port Authority's development plans. On the waterside, priority lies on the Lower Elbe fairway adjustment. In hinterland traffic, the Hamburg Port Authority made use of the crisis times to restore and modernise a large part of the port railway track network within the port area. Since 2008, the Hamburg Port Authority has invested approximately EUR 125 million in railway facilities. On top of this, the port railway introduced a new charging system

offering monetary incentives to train-operating companies to optimise their processes, which improved overall utilisation of the port railway's network. Not least due to these measures did the port railway achieve a record high in 2010, moving over 40 million tonnes of freight. In container traffic the port railway, with 1.93 million TEU handled, only narrowly missed the 2-million mark.

In road-bound freight transports, the Hamburg Port Authority took major steps in 2010 to equip the port to accommodate future transport volume growth: a number of various individual smaller and large-scale projects, such as the start of work on the new construction of the Rethebrücke, a bascule bridge, took off, and plans to build a second Kattwykbrücke (bridge) were advanced. In particular, the measures envisaged in the Road Traffic Master Plan presented in 2010 contributed to intelligent traffic control. Due to the new traffic management system, traffic in the port area can be controlled and managed a lot better now. In the event of incidents, jams and delays can be reduced and the utilisation of existing infrastructure optimised. Apart from offering economic advantages, the traffic management system also helps to lower emissions.

The maintenance and modernisation of the physical infrastructure in the port of Hamburg is supported by an intelligent IT infrastructure. In 2010, the Hamburg Port Authority initiated some major IT upgrading projects, of which several are already completed. Among them are the standardisation of data networks, which so far had been operated separately, and their integration into one efficient and universal overall IT network, the consolidation of the computer centre technology and the creation of the technical conditions to be able to offer highly available IT services.

The port of Hamburg is now technically well equipped to provide modern IT-supported traffic management services which will, for instance, also enhance the service portfolio of the port railway to benefit the port industry.

As the major IT infrastructure upgrading projects have been completed, the focus now lies on optimising applications at the Hamburg Port Authority. Among others, upgrading the IT support system will now be extended to include maintenance management. Another key aspect is to interlink space-related information and make it accessible to the special divisions of the Hamburg Port Authority as well as to external information requestors from the port industry and administration. By modernising internal IT instruments as well as IT instruments used jointly with customers and suppliers to plan and cooperate on development projects, the Hamburg Port Authority has further improved its performance efficiency as a partner of the port industry.

In order to address increasing competition for land and land use in the port area adequately, the Hamburg Port Authority in 2010 took every effort to optimise the land management strategy. The available land area was increased and processes were made more productive, which helped improve the creation of added value and land utilisation rates. Apart from careful portfolio management, the attraction and settlement of new future-oriented, port-related industries is a core objective. Two criteria that promote the positive development of the universal port are high cargo loyalty and job creation.

Though port land is primarily used for diverse port-related purposes, tourism is gaining in importance and the Hamburg Port Authority is developing cooperative concepts that cater to both the economic interests of the port-based businesses and municipal interests. In 2010, a port cycle event route was opened to enhance the port's value as a tourist attraction.

Due to the introduction of intelligent charging systems, the Hamburg Port Authority considerably contributed to a more efficient use of the port railway's infrastructure in the past years. The announcement to include an environmental discount as well as a climate component in the port fee schedule (bonus granted to especially green ships) is another important step towards the establishment of economically and ecologically favourable charging structures that will make the port more competitive.

Investments in expansion and replacement projects that have been implemented

In the 2010 financial year, the refurbishment of the port railway network was accorded highest priority. Apart from successfully managing rapidly increasing transport volumes that reached record heights, several measures to clear the maintenance backlog left over from the years prior to the establishment of the Hamburg Port Authority were completed as planned. Within the port railway network, 69 railway points and more than 18,750 metres of rail tracks were renewed or replaced. Furthermore, six railway bridges were newly constructed or refurbished in 2010.

In order to be able to handle the current high volumes of rail-bound seaport hinterland transports, as well as to accommodate growth well into the future, target-oriented investments in existing and the construction of new facilities will be needed to process traffic smoothly.

In 2010, the road and railway bridge upgrading programme to sustainably improve traffic conditions in the port focused on the continuation of construction measures to renew the Niedernfelder and Müggenburger bridges. In the area of the Niedernfelder thoroughfare, two of a total of four bridges were completed. Operation of the first two refurbished railway bridges across the Müggenburger thoroughfare also started. Within the scope of the new construction of the Rethenbrücke, work to build the road bridge commenced (phase 2). The firm order for the new construction of the bascule bridge could finally be placed in 2010 and construction work will start in 2011. Planning regarding the railway bridge in the area of today's Kattwykbrücke was also advanced.

The development of port sites will allow existing port-operating businesses to expand and new customers from the logistics sector to locate there. Among others, building measures were carried out and partially completed at Mittlerer Reiherstieg, in the Dradenau area, at Witternstraße and at Fährstieg. All development projects will increase the available land on offer in the port area.

Work to upgrade the harbour locks went on at full speed. One major individual project was the expansion of the Ernst-August harbour lock, work on which progressed considerably in 2010. Also in 2010, planning to adjust the Harburg harbour lock to meet the newly imposed rated water level requirements proceeded well.

The expansion of vessel berths to extend the capacities of container terminals continued in 2010. Such, berth 5 at Europakai, serving the Container Terminal Tollerort, was completed and started operations. Construction and refurbishment work at berths 3 and 4 of the Container Terminal Burchardkai proceeded well and fast. After conclusion of the project agreement entered into with the future operator, the planning approval to expand the Container Terminal Altenwerder (5th berth) to the north has been applied for.

At the Blumensandhafen area, the official approval of the plan to construct a new tanker discharging bridge was granted and construction work has commenced.

2. Earnings Situation, Financial and Net Assets Position

For the year ended 31 December 2010, the balance sheet of the Hamburg Port Authority shows a loss amounting to EUR 106.9 million. The current annual result exceeds the result of the previous year by EUR 119.9 million. The improved result is mainly due to lower non-capitalisable project costs in the 2010 financial year. After the planned reversal of the capital reserves, which in the 2010 financial year were increased as planned with the allocation of "HHLA-Milliarde"*, the balance sheet deficit rose by EUR 8.9 million.

In the 2010 financial year, the Hamburg Port Authority generated income amounting to a total of EUR 233.7 million (2009: EUR 217.7 million). The income is composed as follows: a turnover of EUR 144.5 million (2009: EUR 134.9 million), subsidies from public budgets of EUR 40.9 million (2009: EUR 34.6 million) and other income of EUR 48.4 million (2009: EUR 48.2 million).

The turnover is mainly composed of income generated from the leasing out of land held, quay walls and other facilities to the amount of EUR 75.2 million (+3.6 per cent), port fees of EUR 44.2 million (+5.9 per cent) and from the collection of fees for the use of the port railway system amounting to EUR 14.5 million (+24.8 per cent). Compared with the previous year, the additional revenues generated are almost exclusively due to the positive development of traffic volumes as mentioned above. The port fee transshipment discount introduced in the 2010 financial year as an incentive, amounted to EUR 1.5 million. It was paid out to the customers and offset by volume effects.

The public subsidies consist of regular-operation subsidies to the amount of EUR 14.8 million (previous year EUR 4.5 million) and project-related subsidies to the amount of EUR 26.2 million (previous year EUR 30.1 million). The regular-operation subsidies granted include a flat-rate amount of EUR 10 million for port-unrelated expenses.

The subsidies granted for project-related measures include the cost reimbursements for investments within the port area, which could not be capitalised and were funded directly from the public budget. For the most part, these are investments in the expansion of public flood protection facilities (EUR 8.3 million) as well as public roads and bridges (EUR 15 million).

Other income is mainly composed of revenues from the reversal of the special item for investment subsidies (EUR 23 million), own work capitalised (EUR 11.1 million) and income unrelated to the accounting period from dredging work to maintain the sediment trap near Wedel (EUR 3.7 million), as well as income from the reversal of provisions.

The income is offset by operating expenses of a total of EUR 325.1 million (previous year EUR 420.4 million) which consist of costs of material and services received amounting to EUR 130.2 million (-0.1 per cent), staff costs of EUR 91.5 million (-8.1 per cent) as well as depreciations to the amount of EUR 36.9 million (+15.8 per cent) and other operating expenses of EUR 66.5 million (-58.1 per cent).

The costs of material and goods and services purchased include regular infrastructure maintenance work, the expansion of public roadways and public flood protection facilities within the framework of the Hamburg Port Authority's sovereign obligations as well as the operation of the infrastructure facilities.

The staff costs decreased by EUR -8.1 million compared with 2009. However this development reflects the effects of the considerable changes in the allocations to provisions for pensions, semi-retirements and benefits to the amount of EUR -11 million compared to last year. This is mainly due to the first-time application of BilMoG [Accounting Law Modernisation Act], and in particular because now the interest effect with regard to the pension provision allocations must be shown separately. After making adjustments accordingly, the operative staff costs rose by EUR 2.9 million or 3.2 per cent. On the one hand, this is due to a higher annual average number of employees of 32 persons (1.8 per cent), and on the other hand, the tariff and structural adjustment carried out in 2010 resulted in a further increase of 1.4 per cent.

* More detailed information on page 56

The other operating expenses mainly include rental payments and leasehold rent, IT operating costs and marketing and consultancy costs. Furthermore, the item shows the land vacation costs. The significant change over the previous year is due to the substantial decrease in such expenses because of one-time, pre-allocated project-related expenses for the strategic CTS expansion project.

Compared with the previous year, the interest result rose by EUR 0.2 million from EUR –6 million to EUR –5.8 million. However this is mainly due to the first-time application of BilMoG. Adjusted for the BilMoG effects, the interest result amounts to EUR –6.6 million. The increase is the result of the taking up of long-term loans as planned.

The item "other taxes" almost exclusively shows the land tax of EUR 9.2 million (previous year EUR 17.9 million) due for the plots of land held by the Hamburg Port Authority. The amount of the previous year includes additional charges from the preceding years.

Capital reserves at EUR 98 million have been reversed, which means that the planned value is deviated from by less than 1 per cent.

After setting off the loss for the year against the reversal of the capital reserves, the balance sheet deficit in the current financial year amounts to EUR 8.9 million, which is lower than planned by EUR 18.5 million. After deducting the project-related effects, the improved result, when compared with the previous year, is mainly due to higher turnover revenues and lower land tax payments made.

The balance sheet total increased by EUR 186.2 million and amounts to EUR 1,414.8 million. That is due to higher receivables and other assets and the cash shown, each valued as of the closing date, as well as the ongoing heavy investments of the Hamburg Port Authority in the port of Hamburg. The latter is also reflected in the high investment ratio, in terms of tangible fixed assets, of 10.1 per cent (previous year 10.2 per cent).

Major investments in the financial year were the further expansion of the port railway (EUR 46.2 million) as well as the upgrading of plots of land due to soil remediation, including site expansions (EUR 25.2 million), the new construction of the Burchardkai quay wall, berths 3 and 4, and the Europakai vessel berth 5 (EUR 15 million), the new construction of one and the complete restoration of various other buildings (EUR 8 million) as well as the acquisition of plots of land, inclusive of buildings (EUR 7.8 million).

Public road expansion investments and investments in public flood defence projects are not reflected in the Hamburg Port Authority's fixed assets, as these assets are the property of the Free and Hanseatic City of Hamburg. EUR 28.9 million was invested in the expansion of the roadway network and bridges, and EUR 8.5 million was invested in the expansion of public flood defence facilities.

Below, the financial key performance indicators of the institution will be illustrated.

The equity of the institution amounts to EUR 686.2 million, which is equivalent to an equity ratio of 48.5 per cent (previous year 43.7 per cent). The increase by EUR 149.6 million is due to the allocation of the second and third tranche of "HHLA-Milliarde" of a total of EUR 248.7 million, the allocation of the purchase price claims of the Free and Hanseatic City of Hamburg against the Hamburg Port Authority for the acquisition of several plots of land and buildings (EUR 7.8 million) as well as the loss for the year (EUR 106.9 million).

The special item for investment subsidies increased by EUR 20.3 million over the previous year to EUR 271.5 million. This value is offset by the relevant general infrastructure book values in the fixed assets. The combined sum of equity capital and special item for investment subsidies results in a higher self-financing ratio of the fixed assets of 80.1 per cent (previous year 71.4 per cent).

As of 31 December 2010, the Hamburg Port Authority employed 1,774 active staff, a minus of 5 employees compared to the end of the previous year. The appropriations to the provisions for pensions in the 2010 financial year amount to EUR 10.8 million (previous year EUR 8.5 million). These appropriations are offset by entitlements to claim equalisation payments for pension expenses from the Free

and Hanseatic City of Hamburg to the amount of EUR 4.9 million. The entitlement to claim equalisation payments is based on the assurance by the Free and Hanseatic City of Hamburg, set forth in the Act on the Establishment of the Hamburg Port Authority, according to which the pension obligations owed to active employees and incurred prior to the establishment of the Hamburg Port Authority are to be paid for by the Free and Hanseatic City of Hamburg (FHH). Below, some non-financial key performance indicators of the institution will be illustrated.

In September 2010, the Hamburg Port Authority committed to pursue a strategy beneficial to the environment. As a first step to implement this strategy in 2011, environmental guidelines are currently being prepared. Furthermore, the Hamburg Port Authority established a climate protection strategy in December 2010 to govern its activities, declared the respective objectives and outlined the measures to achieve these objectives. In the short term, the Hamburg Port Authority aspires to raise awareness levels among its employees, obtain the certification of two sub-divisions by taking part in the Ökoprot [EcoProfit – Ecological Project for Integrated Environmental Protection] audit and by processing key data systematically and in a target-oriented way to ensure monitoring of the carbon footprint. The CO₂ balance was analysed for the first time in 2010. In the medium and long term, the Hamburg Port Authority strives to achieve the climate protection objectives defined for the Hanseatic City.

The labour turnover rate of the Hamburg Port Authority, amounting to 5.19 per cent in 2010, is significantly below the average rate of the FHH and others. Labour turnover at the FHH was 9.2 per cent in 2009. As the institution, due to the nature of its business segments, also carries out tasks that involve occupational health and safety risks, the Hamburg Port Authority is active here, too, and has in place an adequate system of precautionary measures. The occupational health and safety system of the Hamburg Port Authority comprises safety at work, social counselling, the institution's rehabilitation and reintegration management, severely disabled employee representation, the company doctor and human resource management. Talks about, instructions and trainings in occupational health and safety are held regularly to make management staff and employees aware of occupational health and safety risks and inform them about the legal requirements. The long-term health protection of all employees of the Hamburg Port Authority at work is the joint aim of all parties involved. In 2011, the coordination of the various measures and the introduction of a Hamburg Port Authority-wide operational health management are to promote this aim.

3. Employees

For the employees of the Hamburg Port Authority, 2010 was marked by the ongoing optimisation of the restructuring measures implemented in 2009. Apart from further developing the structures in day-to-day business, other efficiency-enhancing measures were taken.

Furthermore, the Hamburg Port Authority succeeded in professionalising the recruitment of qualified specialists. On the one hand, the selection process was standardised, and on the other hand, new approaches to hiring staff were established.

Despite in part considerable competitive disadvantages (salary levels) a large number of new staff, including qualified specialists, was newly employed.

In the field of staff training and development, the foundation to cope with future challenges (among others demographic changes) was laid. A professional competence management system has been developed to systematically identify, monitor, maintain and promote the competence of staff showing potential in a target-oriented manner. The first development programme geared towards potential high performers started in the autumn already, the other programmes will start in the spring of 2011. In the area of junior staff development and promotion, the first dual education programme students were employed and the cooperation with universities, educational and training institutions was continued, as were initiatives (natural sciences and technology).

4. Report on the Probable Development including Illustration of the Major Risks and Chances

Forecast report

The economic development of the port of Hamburg primarily depends on two factors, of which the most important factor by far is the fairway adjustment project that is still in the planning approval phase. Only if this project is implemented, preferably without further delays and fast, will the port of Hamburg have a realistic chance of getting a fair share in the further development of global transport volumes and maintain and strengthen its position as one of the world's leading ports. If the development of ship sizes is as expected – and to a great extent, these expectations have already been met – the project will become even more urgent. The port's current access conditions do not allow ships calling at Hamburg to be unloaded at economically favourable terms, and entries and departures of vessels on the River Elbe are smooth and safe only because the Hamburg Port Authority provides excellent vessel traffic monitoring services, which, however, lack the required flexibility reserves.

The second factor is reflected in the question of if the port of Hamburg can succeed in incorporating its geographic advantages and highly efficient hinterland on-transport systems into a market-oriented and competitive overall strategy, taking account of megatrends and ever-increasing global interconnectedness. In view of the plunge in traffic volumes in 2009 and the capacity-expanding projects carried out at various European ports, the container market in particular will permanently change from a demand-driven market to an offer-driven market. The rise in traffic volumes in 2010 will not change that. Looking at this development, it is imperative to readjust the strategy to ensure that the port is well equipped to meet future challenges as well as to critically examine the success factors of the past. Provided the fairway adjustment is realised in the next few years, the Hamburg Port Authority assumes that the challenges described above will be coped with, and the port of Hamburg will continue to be the most important economic factor for the metropolitan region in the coming years, too.

Under the assumption that the current financing system remains in place, the HPA will record losses in the upcoming two years, too, despite increases in efficiency and intensification of existing business segments. The losses will be incurred exclusively within the scope of the HPA's duty to provide general public services. The Hamburg Port Authority is required to perform these tasks within the framework of its commission with public assignments without receiving adequate compensation from the public contracting entity. The revenues generated in the private-business sector will not cover this gap in the future either, and if they are to, it will be at the expense of the port's competitiveness as a business site. Therefore, in the coming years, the Hamburg Port Authority will in particular pursue the aim to create a lasting, stable economic situation for the institution. To achieve this goal, the HPA's own economic power needs to be strengthened by improving the efficiency and securing post-funding for the times after the allocations to capital reserves for the provision of general public services have been used up as planned.

Risk and opportunity analysis

The management of the Hamburg Port Authority considers all relevant risks and opportunities that may arise within the meaning of KonTraG [Act on Control Mechanisms and Transparency in Business Enterprises]. In this, the management is supported by a corporate governance instrument that has been established in the institution: the risk and opportunity management system. The system is continuously further developed and adjusted to ensure that the multiple organisational changes of the Hamburg Port Authority are taken account of adequately. Besides the detailed reports from the respective business units, subjects affecting more than one unit are evaluated in conjunction with all parties involved.

The continuous integration of risk and opportunity management aspects in the operative management reporting system is to ensure that this system will increasingly form an integral part of the management principles.

Already, risky developments are assessed and documented at an early stage in all subdivisions of the company, which makes it possible to take the appropriate measures and develop opportunities in a timely manner.

The risk portfolio of the Hamburg Port Authority is composed of different individual risks that can be summarised in the following risk groups: market development risks, financing risks, technical risks, staff risks and natural risks. The opportunity portfolio of the Hamburg Port Authority is predominantly composed of financial and performance-oriented opportunities as well as external condition opportunities (e.g. technological progress, market developments) and internal condition opportunities (e.g. improved information and communication paths).

Market development risks and opportunities

After the devastating effects of the global economic and financial crisis on international trade and shipping, markets calmed down in 2010. The continued strong growth of Asia's markets and the rapid recovery of the eastern European economic regions sent out positive signals for the future development of the port of Hamburg. High handling volumes of 34.8 million TEU within the Hamburg – Le Havre range in 2010 show that the negative impacts of the crisis were of short duration only and the mechanisms of ongoing globalisation are still in place, and it may be assumed that trade will soon be back to pre-crisis levels. A large part of the handling and logistics services in the port of Hamburg are primarily based on trading activities with East Asia and eastern Europe – a fact that justifies the need for further expansion of the port of Hamburg's infrastructure. It is also a chance for the port of Hamburg to strengthen its position as an intercontinental transport hub and benefit from the ongoing strong growth of the economies in the Far East as well as eastern Europe and Russia. When it comes to attracting and securing cargo volumes, Hamburg is in fierce competition with the other North Range ports, in particular Rotterdam and Antwerp. Many ports along the North Sea coast will offer additional handling capacities in the next few years, which makes it likely that price competition between the terminals in the various ports will increase and there is a risk that the other North Range ports will be better equipped to adapt to requirements, leaving Hamburg to deal with a loss in market share.

Though the overall risk of another global recession is currently not evident, it cannot be entirely excluded.

Financing risks

The expansion and replacement investment programme as well as the ongoing operating expenses are almost exclusively funded through the allocations to capital reserves by the Free and Hanseatic City of Hamburg as well as with the HPA's own revenues.

In time, prior to fully using up the promised allocations to capital reserves, a financing concept that caters to the needs of the coming years will have to be developed, as it will not be possible to cope with the entire scope of duties without public subsidies. Public funding is required exclusively in the field of general public services such as, for instance, maintenance and expansion of the public roadway network. In the 2010 financial year, the first additional funds to finance port-unrelated tasks were provided for in the public budget, which caused a reduction of the loss for the year by EUR 10 million. Presently, further solution approaches are being investigated and discussed to develop a feasible long-term financing system, whereby the key focus is on ideas such as the introduction of a service provision and financing agreement or the reimbursement of project investment costs.

In contrast to the general tasks, the user-specific part of the business finances itself. Long-term investments such as, for example, quay walls or floating facilities, are financed by loans which in turn are paid for with revenues generated by the HPA.

To secure the calculation, financing is always managed to match maturities. Loans are taken up at fixed terms or secured by interest rate hedging instruments.

Technical risks

Due to their magnitude and complexity and the many different crafts and trades to be involved, as well as due to the multiple boundary conditions – which may among others be encountered as a result of ongoing port operations – port engineering and hydraulic engineering infrastructure measures usually involve risks that often cannot be foreseen prior to the realisation of a project and whose technical and financial risks can only be assessed on a case-by-case basis. In order to minimise such risks as far as

possible, the planning process – from pre-planning and draft planning all the way to design and implementation planning – is gradually refined and more specified taking account of the required soil testing and other examinations carried out. Yet, despite meticulous planning there may be realisation risks due to, for instance, unexpected soil conditions or unforeseeable circumstances that always have to be reckoned with when building on the waterside and in the water, in particular if it is a tidal water. There are other risks construction teams regularly face, because it is not possible to determine reliably and fully to what extent the site is still contaminated, the soil contains unexploded ordnance or debris of old buildings from its former, sometimes decade-long, use as an industrial site before construction work starts.

In accordance with the Unexploded Ordnance Regulation of 13 December 2005, the Hamburg Port Authority, as the owner of so-called "suspected contaminated sites", has to bear the expenses incurred in connection with the surveying for unexploded ordnance and clearing of the sites. According to § 1 of the regulation, suspected contaminated sites are plots of land that, based on findings provided by the government authority in charge, contain or are suspected to contain unexploded ordnance. As the main areas of land in the port of Hamburg fall into this category, the Hamburg Port Authority has to bear the probing costs incurred for construction projects that have been applied for and approved because, as defined in the Establishment Act [Errichtungsgesetz], the Free and Hanseatic City of Hamburg will not take over the costs. An accurate estimate of the financial costs the Hamburg Port Authority will have to reckon with is not possible as the costs depend directly on the construction projects applied for and approved as well as on the condition of the relevant sites.

Staff risks

After undergoing an extensive corporate restructuring in the past years and coping with the repercussions of the global economic crisis, the efficiency of the Hamburg Port Authority has improved continuously thanks to a core team of motivated employees. The labour turnover rate clearly shows that the professional change management in place for the past two years has reinforced and strengthened the HPA's management and corporate culture. However, in the challenging remuneration environment of the HPA, the risk remains of hiring new staff in a timely manner and as required. In view of rising performance requirements and more pronounced demographic changes, this risk is likely to increase.

Natural risks

In order for the port of Hamburg to stay competitive, it is imperative that access waterways are deep enough to accommodate seagoing vessels. It is of paramount importance therefore to constantly maintain water depths and follow through the planned river channel adjustment to enable ships with a draught of up to 14.5 metres to enter the port, tide-dependent.

As is the case in many large seaports, Hamburg needs to carry out maintenance dredging at regular intervals to maintain the water depths. In view of the ongoing adjustments to nature conservation laws at European level and new scientific insights, it is of particular importance to continuously advance the management of sediments, develop economically and ecologically sustainable solutions and obtain the respective approvals.

In 2006 already, the Hamburg Port Authority, in conjunction with the Bundeswasserstraßenverwaltung [Federal Waterways Management Authority], prepared a concept on the sustainable development of the tidal Elbe. Based on that, a tidal Elbe river engineering and sediment management concept was developed in 2008 that provides for the continuous further development and gradual implementation of the solution approaches outlined in the concept. In order to verify and advance the innovative approaches described in the concept, an external evaluation was initiated at the end of 2010. The evaluation is done by an international expert committee with the aim of optimally integrating into existing sediment management practices the scientific know-how and specific experiences gained in the field of sediment management in estuaries. The experts' recommendations will be available in the summer of 2011 and help to shape the future tidal Elbe sediment management.

In view of the fact that the agreement on the relocation of dredged material into the North Sea will terminate at the end of 2011, as well as the currently ongoing verification of parameters regarding a relocation within the Hamburg area and the limited capacities available for treatment on land, it is necessary to continue to advance the management of sediments and obtain the required approvals.

Risks to the organisation as a going concern as well as other risks that may adversely affect the net assets position, financial position and earnings situation of the institution in the medium term are not recognisable at the moment.

5. Supplementary Report

No events of special importance to the state of affairs of the institution have occurred after the balance sheet closing date.

Hamburg, 4 March 2011

Jens Meier
Chairman of the Management Board

Wolfgang Hurtienne
Managing Director

Profit and Loss Account for the Financial Year from 1 January to 31 December 2010

Hamburg Port Authority, Anstalt des öffentlichen Rechts
[Institution under Public Law], Hamburg

	31.12.2010	31.12.2009
	EUR	EUR
1. Turnover	144,471,322.70	134,860,904.88
2. Other own work capitalised	11,149,952.78	9,220,241.43
3. Other operating income	78,128,085.00	73,569,704.41
4. Cost of materials		
a) Cost of raw materials and consumables	11,614,072.82	11,025,858.71
b) Cost of purchased services	118,573,283.79	119,230,682.02
5. Staff costs		
a) Wages and salaries	76,553,076.49	76,835,372.98
b) Social security, pension and other benefits of which relating to pensions: EUR 974,487.18 (previous year: EUR 9,314,955.54)	14,903,239.39	22,670,703.14
6. Amortisation and depreciation of fixed intangible and tangible assets	36,899,327.15	31,867,843.41
7. Other operating expenses	66,591,744.51	158,812,480.04
8. Other interest receivables and similar income of which from the Free and Hanseatic City of Hamburg EUR 4,506.06 (previous year: EUR 151,243.23)	10,816,605.95	404,012.49
9. Other interest receivables and similar income of which to the Free and Hanseatic City of Hamburg EUR 13,139.37 (previous year: EUR 22,712.26)	16,657,612.01	6,424,479.61
10. Loss on ordinary activities	-97,226,389.73	-208,812,556.70
11. Extraordinary income	1,587,180.60	0.00
12. Extraordinary expenses	2,012,307.33	0.00
13. Loss on extraordinary activities	-425,126.73	0.00
14. Other taxes	9,249,847.17	17,969,001.56
15. Loss for the year	-106,901,363.63	-226,781,558.26
16. Loss brought forward from the previous year	-28,550,934.92	-3,569,376.66
17. Withdrawals from capital reserves	98,000,000.00	201,800,000.00
18. Balance sheet deficit	-37,452,298.55	-28,550,934.92

Balance Sheet as of 31 December 2010

Hamburg Port Authority, Anstalt des öffentlichen Rechts
[Institution under Public Law], Hamburg

Assets	31.12.2010	31.12.2009
	EUR	EUR
A Fixed assets		
I. Intangible assets		
1. Purchased concessions, industrial property and similar rights and assets, and licences in such rights and assets	10,488,643.68	2,536,256.80
2. Payments on account	8,229,168.78	9,635,228.68
	18,717,812.46	12,171,485.48
II. Tangible assets		
1. Land, similar rights and buildings including buildings on third-party land	742,326,520.16	704,011,173.79
2. Technical equipment and machinery	297,494,075.63	258,259,074.45
3. Other equipment, factory and office equipment	23,485,318.50	18,002,327.01
4. Payments on account and assets in the course of construction	114,230,838.29	110,785,260.54
	1,177,536,752.58	1,091,057,835.79
III. Financial assets		
Participating interests	14,303.00	13,553.00
	1,196,268,868.04	1,103,242,874.27
B Current assets		
I. Stocks		
Raw materials and consumables	2,687,471.26	2,692,253.71
II. Receivables and other assets		
1. Trade debtors	15,959,390.93	17,672,148.90
2. Amounts owed by the Free and Hanseatic City of Hamburg and amounts owed by group undertakings	120,605,515.73	96,755,132.99
3. Other assets	6,575,156.41	7,890,005.28
	143,140,063.07	122,317,287.17
III. Cash in hand and bank balances	72,443,969.39	39,938.78
	218,271,503.72	125,049,479.66
C Prepaid expenses		
	282,119.09	288,653.45
	1,414,822,490.85	1,228,581,007.38

Equity and liabilities	31.12.2010	31.12.2009
	EUR	EUR
A Equity		
I. Subscribed capital	150,000,000.00	150,000,000.00
II. Capital reserves	573,618,404.18	415,155,092.48
III. Balance sheet deficit	-37,452,298.55	-28,550,934.92
	686,166,105.63	536,604,157.56
B Special item for investment subsidies	271,535,833.28	251,187,783.17
C Provisions		
1. Provisions for pensions and similar obligations	108,315,220.25	97,809,598.59
2. Tax provisions	12,866,577.00	15,581,800.00
3. Other provisions	73,823,110.39	66,254,241.46
	195,004,907.64	179,645,640.05
D Liabilities		
1. Bank loans and overdrafts	199,158,665.30	186,152,752.92
2. Trade creditors	19,174,294.77	23,003,828.59
3. Amounts owed to the Free and Hanseatic City of Hamburg and amounts owed to group undertakings	121,375.48	3,747,150.42
4. Other liabilities	37,930,882.09	42,100,583.38
	256,385,217.64	255,004,315.31
E Deferred income	5,730,426.66	6,139,111.29
	1,414,822,490.85	1,228,581,007.38

Fixed-Asset Movement Schedule for the Financial Year from 1 January to 31 December 2010 – Commercial Law

Hamburg Port Authority, Anstalt des öffentlichen Rechts
[Institution under Public Law], Hamburg

	Acquisition or production costs				
	As of 1.1.2010	Additions	Disposals	Repostings	As of 31.12.2010
	EUR	EUR	EUR	EUR	EUR
I. Intangible assets					
1. Concessions, industrial property and similar rights and assets, and licences in such rights and assets	5,555,633.75	1,900,999.62	651.00	8,991,683.85	16,447,666.22
2. Payments on account	9,635,228.68	8,200,208.06	0.00	-9,606,267.96	8,229,168.78
Total intangible assets	15,190,862.43	10,101,207.68	651.00	-614,584.11	24,676,835.00
II. Tangible assets					
1. Land, similar rights and buildings including buildings on third-party land	718,519,197.79	25,148,522.94	224,714.87	17,168,799.44	760,611,805.30
2. Technical equipment and machinery	353,474,028.27	23,942,567.14	1,095,574.59	41,362,616.12	417,683,636.94
3. Other equipment, factory and office equipment	30,205,917.47	4,748,507.98	666,533.48	5,342,748.07	39,630,640.04
4. Payments on account and assets equipment in the course of construction	110,785,260.54	68,556,167.64	1,851,010.37	-63,259,579.52	114,230,838.29
Total tangible assets	1,212,984,404.07	122,395,765.70	3,837,833.31	614,584.11	1,332,156,920.57
III. Financial assets					
Participating interests	13,553.00	1,850.00	1,100.00	0.00	14,303.00
Total financial assets	13,553.00	1,850.00	1,100.00	0.00	14,303.00
Total fixed assets	1,228,188,819.50	132,498,823.38	3,839,584.31	0.00	1,356,848,058.57

Depreciations				Book value		
As of 1.1.2010	Current financial year	Disposals	Repostings	As of 31.12.2010	Book value 31.12.2010	Book value 31.12.2009
EUR	EUR	EUR	EUR	EUR	EUR	EUR
3,019,376.95	2,940,296.59	651.00	0.00	5,959,022.54	10,488,643.68	2,536,256.80
0.00	0.00	0.00	0.00	0.00	8,229,168.78	9,635,228.68
3,019,376.95	2,940,296.59	651.00	0.00	5,959,022.54	18,717,812.46	12,171,485.48
14,508,024.00	3,849,157.00	66,567.00	-5,328.86	18,285,285.14	742,326,520.16	704,011,173.79
95,214,953.82	25,573,075.12	601,635.65	3,168.02	120,189,561.31	297,494,075.63	258,259,074.45
12,203,590.46	4,536,798.44	597,228.20	2,160.84	16,145,321.54	23,485,318.50	18,002,327.01
0.00	0.00	0.00	0.00	0.00	114,230,838.29	110,785,260.54
121,926,568.28	33,959,030.56	1,265,430.85	0.00	154,620,167.99	1,177,536,752.58	1,091,057,835.79
0.00	0.00	0.00	0.00	0.00	14,303.00	13,553.00
0.00	0.00	0.00	0.00	0.00	14,303.00	13,553.00
124,945,945.23	36,899,327.15	1,266,081.85	0.00	160,579,190.53	1,196,268,868.04	1,103,242,874.27

Notes to the Annual Financial Statements for the Financial Year from 1 January to 31 December 2010

Hamburg Port Authority, Anstalt des öffentlichen Rechts
[Institution under Public Law], Hamburg

1. General Information

The annual financial statements of the Hamburg Port Authority Anstalt des öffentlichen Rechts, Hamburg, (HPA) have been prepared in accordance with § 13 (2) of the Act on the Establishment of the Hamburg Port Authority (HPAG). The financial statements have been drawn up in accordance with the provisions as set forth in HGB [German Commercial Code] as amended by BilMoG [Accounting Law Modernisation Act] of 25 May 2009 applicable to big companies limited by shares/corporations in as far as the further provisions of HPAG do not conflict with the application of the commercial law.

The amended regulations were applied for the first time in the 2010 financial year.

When drawing up the financial statements based on BilMoG for the first time, the figures of the previous year have not been adjusted based on the right of choice as defined in § 67 (8), Sentence 3 EGHGB [Introductory Law of the German Commercial Code].

Staff costs and interest expenses can be compared to the previous year to a limited extent only because until the 2009 financial year, the proportion of interest contained in the allocation to pension provisions was appropriated to staff costs and since the 2010 financial year has been reflected in interest expenses.

The profit and loss account has been prepared in accordance with the type-of-expenditure format.

The financial year of the HPA corresponds to the calendar year.

2. Accounting and Valuation Methods

The financial statements have been prepared based on the subsequent accounting and valuation methods.

Intangible assets are valued at acquisition costs less planned depreciation calculated on a straight-line basis to write off their cost over their estimated useful lives, whereby the periods of use range from three to five years. The HPA has not capitalised any internally generated intangible assets.

Tangible assets are principally valued at acquisition and production costs and, in as far as they are subject to wear and tear, reduced by planned straight-line depreciation. The periods of use range from three years (hardware) to 75 years (railway bridges made of steel).

The production costs include foreign capital interests to the amount of TEUR 2,115** (previous year TEUR 1,681) pursuant to § 255 (3), Sentence 2 HGB.

Land and similar rights, respectively, municipal buildings and other facilities taken over from the Free and Hanseatic City of Hamburg (FHH), for which no historical residual book values could be determined, have been valued on the basis of capitalised earnings values and comparative values as

** 1 TEUR is equivalent to 1,000 EUR

of 1 October 2005. It is prohibited by law to use the immovable/landed property as collateral or sell it. In particular, the capitalised earnings value method has been applied to land leased out, with and without connection to quay walls, as well as to land not yet leased out which, however, can be leased out. All other land has been valued using the comparative value method. Water areas have been estimated at a pro memoria value of EUR 1, as both the capitalised earnings value and the comparative value method cannot be applied.

Since 1 January 2008, low-value assets up to a purchase value of EUR 150 are to be written off immediately in the year they have been purchased. Assets acquired after 31 December 2007, whose acquisition or production costs range from EUR 150 to EUR 1,000, are entered in a collective item, which is written off annually on a straight-line basis at a rate of 20 per cent.

Financial assets are valued at acquisition costs.

Stocks are assessed at acquisition costs or the lower current values (lower-of-cost value).

Receivables and other assets are valued at nominal value taking into account all recognisable risks.

Cash is valued at nominal value.

Expenses incurred or income generated prior to the balance sheet closing date are shown as **prepaid expenses/deferred income** in as far as they represent expenses or income over a certain period after this date.

Pension provisions are reflected in the balance sheet in accordance with the projected unit credit method pursuant to the resolution of 30 November 2010 adopted by the Senate Commission of the FHH that applies to public enterprises. This calculation method replaces the net present value method applied so far. The impact of this change in evaluation practice (from net present value method to projected unit credit method) has not been analysed. The corresponding claim against the FHH has also been valued based on actuarial principles (analogous to determining the pension provisions).

Tax provisions and other provisions are recognised as an expense in accordance with the required settlement amount based on reasonable commercial assessment. Semi-retirement and anniversary provisions are valued based on actuarial principles.

For provisions with a residual term of more than one year, future price and cost increases have been taken account of and discounted as of the balance sheet closing date. The discount rates used are the average market rates of interest of the past seven financial years, that correspond to the residual terms of the provisions, as determined and published monthly by the Deutsche Bundesbank [German Federal Bank] in accordance with the Rückstellungsabzinsungsverordnung [Regulation on the Discounting of Provisions].

Provisions for expenses pursuant to § 249 (2) HGB old version to the total amount of TEUR 5,000 were maintained in accordance with § 67 (3), Sentence 1 EGHGB.

Liabilities are valued at their settlement amount.

Deferred taxes as defined in § 274 HGB have not been accounted for as the HPA as an infrastructure-providing enterprise generates tax losses only, which are offset by equity contributions made by the FHH. Due to its nature as an infrastructure-providing enterprise, as well as due to the way the financing is structured, the existing differences between the valuation of assets, debts and prepaid expenses/deferred income in accordance with commercial-law and their valuation for tax purposes will neither lead to tax burdens nor tax reliefs in the foreseeable future as they will be reversed in later financial years.

Due to different valuation methods there are differences between the valuation of the fixed assets and the provisions based on commercial law and for tax purposes.

3. Notes to the Balance Sheet

Fixed assets

The development of the fixed assets is shown in the fixed-asset movement schedule on page 52.

Among others, the financial assets contain the participating interest in Polder-Seehäfen-Harburg GmbH, Hamburg, at a participation rate of TEUR 9. The HPA's participation share amounts to roughly 25 per cent of the authorised share capital of TEUR 35, the profit for the financial year from 1 July 2008 to 30 June 2009 amounted to TEUR 3.

Receivables and other assets	31.12.2010	31.12.2009
	TEUR**	TEUR
Trade debtors	15,959	17,672
of which amounts falling due after more than 1 year	0	0
Amounts owed by the FHH and group undertakings	120,606	96,755
of which amounts falling due after more than 1 year	90,441	85,903
Other assets	6,575	7,890
of which amounts falling due after more than 1 year	159	168
Receivables and other assets	143,140	122,317
of which amounts falling due after more than 1 year	90,600	86,071

The balance sheet item "amounts owed by the FHH and group undertakings" includes other receivables amounting to TEUR 116,185 (previous year TEUR 91,673) as well as trade debtors amounting to TEUR 4,421 (previous year TEUR 5,082).

Equity	31.12.2010	31.12.2009
	TEUR	TEUR
Subscribed capital	150,000	150,000
Capital reserves	573,618	415,155
of which capital contribution	256,490	193,047
of which capital withdrawal	-98,027	-201,800
Balance sheet deficit	-37,452	-28,551
of which from annual result	-106,901	-226,781
of which withdrawal from capital reserves	98,000	201,800
Equity	686,166	536,604

Due to the changes in the financing system of the HPA in 2009, the institution receives annual tranches from the proceeds of the partial initial public offering of the HHLA Hamburger Hafen und Logistik AG, Hamburg (HHLA) – the so-called "HHLA-Milliarde [HHLA billion]" – to finance the development and management of the port. These tranches will be allocated to capital reserves. In the 2010 financial year, TEUR 248,700 was appropriated. A further increase in capital reserves is due to the contribution of a total of TEUR 7,790 which the HPA owes to the FHH in connection with the acquisition of several plots of land. The FHH paid for the plots of land which the HPA purchased under the law of obligations and the resulting reimbursement amounts owed to the FHH have been posted to capital reserves.

TEUR 98,000 was withdrawn from capital reserves for ongoing expenses, whereby TEUR 48,000 was allotted for projects and TEUR 50,000 for maintenance measures. The withdrawal is related to the changes in the financing system of the HPA.

** 1 TEUR is equivalent to 1,000 EUR

The HPA's financing system underwent fundamental changes in the 2009 financial year. Until 30 April 2009, the HPA received public subsidies for investments and projects to maintain and expand the general infrastructure. These subsidies have been largely replaced by the "HHLA-Milliarde", which will be granted in annual tranches and allocated to capital reserves. Insofar the amount of the **special item for fixed-asset investment subsidies** corresponds to the subsidised general infrastructure residual book values. The special item is reversed on a pro-rated basis in accordance with the relevant depreciation amounts.

In the 2010 financial year, TEUR 43,387 (previous year TEUR 30,313) was allocated to the special item for investment subsidies, whilst TEUR 23,039 (previous year TEUR 19,831) was reversed and recognised as income.

Provisions	31.12.2010	31.12.2009
	TEUR	TEUR
Provisions for pensions and similar obligations	108,315	97,810
Tax provisions	12,867	15,582
Provisions for staff administration	15,055	15,722
Other provisions of which	58,768	50,532
Unpaid suppliers' invoices	10,562	6,157
Stiftung Lebensraum Elbe [Elbe Habitat Foundation]	13,261	1,544
Risk provision regarding Hamburg Aluminium Werke	5,000	5,000
Compensation and reimbursement/replacement measures	6,502	5,113
Dredged material/sediments	5,160	13,500
Unexploded ordnance (UXO) clearance	9,706	10,019
Total provisions	195,005	179,646

The pension provisions have been made on the basis of the actuarial calculation method, whereby the projected unit credit method has been applied. The interest rate used is 5.15 per cent and the increase in wages and salaries is expected to be 2 per cent. The assumed increase in pensions amounts to 1 per cent for blue- and white-collar workers and 2 per cent for civil servants. The 2005 G life tables drawn up by Prof. Dr. Klaus Heubeck have been used. The flat-rate discount rate applied to the pension provisions is the average market rate of interest as published by the Bundesbank, based on an assumed residual term of 15 years.

The change in the pension provision valuation method pursuant to BilMoG and the FHH-wide change of the valuation method to the projected unit credit method results in an additional one-time provision to the amount of TEUR 26,098. The transitional provision pursuant to § 67 (1) EGHGB has been applied and of this amount, one fifteenth or TEUR 1,740 has been appropriated to pension provisions. The appropriation is reflected in the profit and loss account as extraordinary expense. The amount of TEUR 24,358 from the initial application, which is not shown on the balance sheet yet, will be consistently appropriated to pension provisions within the remaining transitional period.

Based on the law on the establishment of the "Stiftung Lebensraum Elbe" of 11 May 2010, the HPA is obligated to pay to the foundation, from 1 March 2009 onward, 4 per cent annually of the income generated from port fees. The obligation will end after the foundation has been paid a total of EUR 40 million as set forth in the law. According to the HPA's calculations the last such payment will be due in 2020.

The **risk provision for Hamburg Aluminium Werke (HAW)** has been made due to soil contaminations of the land then leased out to HAW.

Due to interventions in nature caused by ongoing projects managed by the HPA, provisions for **compensation and replacement measures** as defined in the Hamburg Nature Protection Act have been made.

Liabilities	31.12.2010	31.12.2009
	TEUR	TEUR
Bank loans and overdrafts	199,159	186,153
of which the residual term is less than one year	13,367	45,235
of which the residual term is more than five years	135,285	101,671
Trade creditors	19,174	23,004
of which amounts falling due in less than 1 year	19,174	23,004
of which amounts falling due in more than 5 years	0	0
Amounts owed to the FHH and amounts owed to group undertakings	121	3,747
of which amounts falling due in less than 1 year	121	3,747
of which amounts falling due in more than 5 years	0	0
Other liabilities	37,931	42,100
of which amounts falling due in less than 1 year	31,665	29,758
of which amounts falling due in more than 5 years	83	97
Total liabilities	256,385	255,004
of which amounts falling due in less than 1 year	64,327	101,744
of which amounts falling due in more than 5 years	135,368	101,768

There are no liabilities secured by lien or similar rights.

Other financial obligations	31.12.2010	31.12.2009
	TEUR	TEUR
Multi-year tenancy, lease and maintenance agreements	9,341	8,810
of which owed to group undertakings	3,817	3,242
Purchase commitments	161,316	157,901
Total other financial obligations	170,657	166,711

4. Notes to the Profit and Loss Account

Classification of the turnover	31.12.2010	31.12.2009
	TEUR	TEUR
Rental income from land held	58,075	56,451
Rental income from quay walls	12,172	12,133
Other rental income	4,933	4,006
Total rental income	75,180	72,590
Port fees (incl. other income from port operations)	44,178	41,731
Income generated by the port railway	14,542	11,652
Elbtunnel fees	178	272
Fees and charges	2,830	3,093
Income from the supply of maintenance and other services	7,563	5,523
Total turnover income	144,471	134,861

Reversal of/posting to special item for investment subsidies

In the 2010 financial year, TEUR 43,387 (previous year TEUR 30,313) was appropriated to the special item for investment subsidies, whilst TEUR 23,039 (previous year TEUR 19,831) was reversed and recognised as income.

Income/expenses unrelated to the accounting period

In the 2010 financial year, the **income unrelated to the accounting period** that is of non-subordinate importance amounts to TEUR 10,839 (previous year TEUR 12,741). It is mainly income from reimbursements for the sediment trap near Wedel to the amount of TEUR 3,690, income generated from the additional charge of land lease fees amounting to TEUR 266, as well as from provision reversals amounting to TEUR 6,605.

The **expenses unrelated to the accounting period** amount to TEUR 175 (previous year TEUR 6,151).

Interest income, interest expenses

The **interest income** predominantly includes income from the discounting of long-term provisions to the amount of TEUR 3,201 and the compounding of long-term receivables amounting to TEUR 7,176.

The item **interest expenses** includes expenses from the compounding of long-term provisions to the amount of TEUR 9,595.

Extraordinary income, extraordinary expenses

The **extraordinary expenses** recognised in the 2010 financial year are the result of the changed valuation of the pension provisions and provisions for semi-retirement and anniversary obligations due to the first-time application of BilMoG.

Accordingly, the **extraordinary income** is the result of the changed valuation of the receivables from the reimbursement claim owed by the FHH.

5. Further Explanatory Notes

Employees

On average the HPA employed a total of 1,774 persons (previous year 1,742). This figure breaks down as follows: 190 civil servants (previous year 195) and 1,584 blue- and white-collar workers (previous year 1,547). Of the total workforce, 96 employees were part-time staff (previous year 94).

Derivative financial instruments

In order to secure the loan interest rate in the long term, an interest rate swap agreement on the total loan sum lasting over the entire loan term has been entered into. The market value of the interest rate swap as of 31 December 2010 amounts to TEUR -6,375. It has been determined on the basis of generally accepted valuation methods (mark to market). As the transactions are based upon closed items, there was no need for making provisions. As of 31 December 2010, the total loan amount due amounted to TEUR 66,418; the loan costs amounted to TEUR 741.

Auditors' fees

In the 2010 financial year, the total fees charged by the auditors for auditing services amount to only TEUR 55.

Supervisory board

Ian K. Karan

Chairman of the Supervisory Board since 1 October 2010

Präsident [President] of the State Ministry for Economic and Labour Affairs, FHH, since 25 August 2010

Appointed as Chairman of the Supervisory Board as of 1 October 2010

Axel Gedaschko

Chairman of the Supervisory Board until 30 September 2010

Präsident [President] of the State Ministry for Economic and Labour Affairs, FHH, until 24 August 2010

Retired as of 30 September 2010

Dr Michael Voges

Staatsrat [State Secretary] of the State Ministry for Finance

Appointed as of 7 September 2010

Dr Robert Heller

Deputy Chairman of the Supervisory Board

Staatsrat [State Secretary] of the State Ministry for Finance

Retired as of 7 September 2010

Hermann Ebel

Chairman of the Board of Directors of Hansa Treuhand Holding AG

Appointed as of 30 November 2010

Frank Horch

Deputy Chairman of the Supervisory Board

Präsident [President] of the Hamburg Chamber of Commerce

Appointed as Deputy Chairman of the Supervisory Board as of 17 December 2010

Rolf Kirchfeld

Former Member of the Board of Directors of Vereins- und Westbank AG, Hamburg

Sandra Orth

Employee Representative of the Hamburg Port Authority

Dr Horst-Michael Pelikahn

Senate Director of the State Ministry for Urban Development and the Environment, FHH

Claudia Schick

Employee Representative of the Hamburg Port Authority

Rolf Schubert

Employee Representative of the Hamburg Port Authority

Management board**Jens Meier**

Chairman of the Management Board

Wolfgang Hurtienne

Managing Director

Total compensation of the supervisory board and management board

The members of the supervisory board were paid meeting attendance fees amounting to a total of TEUR 3.

The total compensation of the management board amounted to TEUR 469, of which TEUR 349 is a fixed component and TEUR 120 is a result-oriented component.

Transparency

On 17 December 2010, the management board and the supervisory board declared that the provisions set forth in the Hamburg Corporate Governance Kodex (HCGK), the observation of which is the responsibility of the management board and the supervisory board (items 3 to 7 of HCGK as well as their sub-items), have been complied with.

The financial statements, the directors' report as well as the Entsprechenserklärung [declaration of conformity] will be published at:

<http://www.hamburg-port-authority.de/presse-und-aktuelles/broschueren-publikationen.html>

Group relationships

The annual financial statements of the Hamburg Port Authority will be incorporated in the consolidated financial statements of the Free and Hanseatic City of Hamburg, Hamburg.

The consolidated financial statements will be published on the internet.

Hamburg, 4 March 2011

Jens Meier
Chairman of the Management Board

Wolfgang Hurtienne
Managing Director

Auditors' Opinion

We have audited the financial statements – which comprise the balance sheet, the profit and loss account as well the notes to the financial statements – including the accounting records and the directors' report of the Hamburg Port Authority Anstalt des öffentlichen Rechts [Institution under Public Law], Hamburg, for the financial year from 1 January to 31 December 2010. The accounting records as well as the preparation of the financial statements and the directors' report in accordance with the applicable German commercial law and the supplementary provisions of the Act on the Establishment of the Hamburg Port Authority of 1 October 2005 are the responsibility of the management board of the institution. Our responsibility is to express an opinion on the financial statements, taking into account the accounting records, and on the directors' report based on our audit.

We conducted our audit of the financial statements in accordance with § 317 HGB [German Commercial Code] and in accordance with the auditing standards generally accepted in Germany issued by the Institut der Wirtschaftsprüfer [Institute of German Auditors]. These standards require that we plan and perform the audit so as to obtain all the information and explanations which we consider necessary in order to provide us with sufficient evidence to give reasonable assurance about whether the financial statements are free from material misstatements and inconsistencies, whether caused by fraud or other irregularity or error, and whether the financial statements, prepared in accordance with the generally accepted accounting principles, and the statement on the net assets position, financial position and earnings situation of the institution reflected in the directors' report give a true and fair view. When determining the course of our audit, we have taken into account the knowledge on the business activities and the economic and legal environment of the institution as well as the potential for possible errors. An audit includes the examination, mainly on a test basis, of evidence relevant to the effectiveness of the accounting principles used with regard to the system of internal controls as well as of evidence relevant to the amounts and disclosures in the accounting records, the financial statements and the directors' report. It also includes an assessment of the significant estimates and judgments made by the management board in the preparation of the financial statements and whether the accounting policies are appropriate to the institution's circumstances, consistently applied and adequately disclosed. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements and the directors' report. We believe that our audit provides a reasonable basis for our opinion.

Based on our audit nothing has come to our attention that causes us to believe that the financial statements have not been properly prepared.

In our opinion, based on the information obtained during our audit, the financial statements of the Hamburg Port Authority Anstalt des öffentlichen Rechts, Hamburg, have been properly prepared in accordance with the relevant legal and regulatory requirements as well as the supplementary provisions of the Act on the Establishment of the Hamburg Port Authority of 1 October 2005, and they give a true and fair view of the net assets position, financial position and earnings situation of the institution in accordance with the generally accepted accounting principles for the year then ended. The directors' report is consistent with the financial statements, gives a true and fair overall view of the state of affairs of the institution and adequately presents the prospects and risks of the future development.

Hamburg, 19 May 2011

Deloitte & Touche GmbH
Wirtschaftsprüfungsgesellschaft [Registered Auditors]

(Dietterle) (p.p. Arlitt)
Wirtschaftsprüfer [Auditor] Wirtschaftsprüferin [Auditor]

The Hamburg Corporate Governance Kodex

The Hamburg Corporate Governance Kodex (HCGK) is a code that defines the duties and standards relevant for the activities and interaction of members/partners, supervisory boards and the managing directors of Hamburg's public institutions.

The HCGK is seen as a contribution to, and impulse for, the continuous management improvement in Hamburg's public institutions. Furthermore, the code has been developed to ensure greater transparency within these institutions and thus strengthen public trust in decisions taken by administrations and politics.



Entsprechenserklärung zum Hamburg Corporate Governance Kodex (HCGK)

Die Geschäftsführung und der Aufsichtsrat der Hamburg Port Authority erklären hiermit:

Die Hamburg Port Authority hat im Geschäftsjahr 2010 die Regelungen des Hamburger Corporate Governance Kodex eingehalten, die von Geschäftsführung und Aufsichtsrat zu verantworten sind (Gliederungspunkte 3 – 7 des HCGK sowie deren Unterpunkte).

Hamburg, 17. Dezember 2010

<p>Für die Geschäftsführung:</p> <div style="text-align: center; margin-top: 20px;">  _____ Jens Meier (Vorsitzender) </div> <div style="text-align: center; margin-top: 20px;">  _____ Wolfgang Hurtienne </div>	<p>Für den Aufsichtsrat:</p> <div style="text-align: center; margin-top: 20px;">  _____ Ian Karan (Vorsitzender) </div>
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Anstalt des öffentlichen Rechts
Neuer Wandrahm 4
20457 Hamburg

Geschäftsführer:
Jens Meier (Vors.), Wolfgang Hurtienne
Aufsichtsratsvorsitzender:
Senator Ian Karan

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This Annual Report has been prepared for the convenience of our English-speaking readers. It is based on the German original. In the event of any inconsistency or conflict between the German and the English version, the German version shall prevail.

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