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Cover : Passing Zelzate bridge (Canal Gent - Terneuzen).
Picture courtesy of Capt Rob Koers .



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- DUTCH PILOTS -

"Together we challenge the future"

Togetherness

The theme of the 49th General Meeting of EMPA in 2015 was "**Together we challenge the future**".

The participants of the very well organized conference in Estoril in Portugal did indeed challenge the future, through exciting and innovative presentations and discussions, and through new and strengthened acquaintances. Colleagues from all over Europe, as well as cooperating industry representatives, authorities, and maritime stakeholders presented state-of the art technologies, organizational models and valuable safety lessons that for sure will contribute in shaping European pilotage and the maritime cluster during the years to come.



Of course; not every single idea and concept that is being brought forward will prove to have the required quality in order to be sustainable and gain the necessary support of the future. That is the way it should be; ideas need to be challenged weighted and discussed before they are adopted, amended or discarded!

Pilotage is one of the most internationally influenced professions of the modern industrial world. It is quite noteworthy how similarly pilotage is conducted in the different ports of Europe, and in the different parts of the world – despite considerable variation in culture, organization models and in local legislation. In all corners of the maritime world pilots climb the same pilot ladders and handle the same ships. Hence it makes sense that when we continue our never-ending efforts of strengthening our abilities to serve the public safety interests, we should do this together. Not by revolutionizing our profession, but rather by doing what European pilots always have been doing; through evolutionary progress based on sound seamanship and thorough nautical knowledge, but also with visionary willingness to embrace and develop new ideas and new technologies.

In contradiction to the principles that the United Nation's maritime body IMO has laid down in its resolution A.960, the European Commission has once more proposed new EU legislation that would be interfering into the local powers of the competent pilotage authorities, by paving the road for implementing Market Access and competition logics within European port pilotage. Remarkably, this is done without conducting any safety assessment whatsoever of the impacts of such experiments. EMPA and our member associations have together pointed to the fact that all over the world where pilotage has been commercialized and exposed to free market philosophies, the result has been evident degradation of safety standards, security and of the efficiency of the ports. The total costs that have to be paid by the port users have risen, and certainly not subsided!

Therefore, in the vast majority of nations where these experiments have been tested, the authorities have reverted to recognizing pilotage as a public service that should be organized and regulated locally, by ensuring that the pilots are able to maintain their independence and integrity towards commercial pressure and consequential threat to maritime safety.

It is reassuring that today it appears to be broad political support in the European Parliament to reject that part of the Commission's proposal, in line with what the European parliamentarians have done several times before. This illustrates that when we pilots join together and explain our professional knowledge; our message is being listened to and taken into consideration.

The fact that the pilotage profession is so typically characterized by individual professionals with common goals and common challenges, places considerable responsibilities on the shoulders of all of us.

The manner in which every single one of us pilots conduct our daily tasks and the way we cooperate with each other and with our collaborating partners on board and ashore, the way that every single one of us always demonstrates professionalism, quality and up-to-date skills – is invaluable for the pilotage profession.

As it is for maritime safety and for efficiency and sustainability of the vital maritime transport through Europe's ports and fairways.

Stein Inge Dahn
EMPA President

New Elected Boardmembers

Capt. Miguel Vieira de Castro

Dear Colleagues,

For the ones who don't know me, my name is Miguel Vieira de Castro, and I've been elected on our last GM in Estoril, your Vice President for Communication.

I'm a proud father of 3 sons, Tomás, Henrique and Francisco and happily married with Mafalda for 22 years.

Like all of us I had a career at sea mainly on Oil and LPG tankers, and after that, in 2001, I've started as a pilot on Madeira Island. One year later I've moved to Sines, where I'm still working as a Senior Pilot.

This is year, I had the privilege and honor of being elected President of APIBARRA - Portuguese Maritime Pilots' Association and before that, I was Vice President for 8 years.

Regarding my education, I have an MSc in Port Management, a Post-graduation course in Maritime Law and a BSc in Maritime Sciences.

My vision for EMPA is clear: to have everybody on board! We do need to improve our communication, make sure that it is done both ways. Not only forwarding information, but specially asking our members what are their needs and expectations from EMPA, acting as a pivot point to exchange experiences from and to our different members.

Also we pretend to make EMPA more visible showing the BoD activity on the different forums we are attending. This will enable us to show our members what our work is during the year. But, also, we will show our stakeholders that we are really actively defending Pilots' interests.

Nowadays, everything is done on the web, so we are reinforcing our participation in social networks Facebook, twitter and LinkedIn. To be more visible, we really need our associates to participate, with likes, comments or to give us news to post, even a photo or a small video from a manoeuvre. Don't forget that something that is really usual for you, can be really surprising and exciting for a colleague or a Stakeholder.

If you wish to contact me please don't hesitate I'm here to assist you all.
Keep up your good work making our ports and seas safe and efficient!!!

Capt. Bjarne Cæsar Jensen

Dear Colleagues,

I'm from a family with no traditions for seafaring. I grew up as the oldest of four children, and gained my first seagoing experience together with my parents, brothers and sister as yachtsman.

My career at sea started as apprentice officer in the East Asiatic Company in the year of 1982, were I mostly sailed with container ships but also tried both ro/ro and bulk. After graduation in the end of 1988 I was doing service for the Royal Danish Navy as conscript naval reserve officer. I stayed in the navy until 1992. In late '92 I went to sea in the merchant navy sailing gas carriers for Lauritzen Kosan tankers, were I had less than 3 weeks as relieving captain, before I got at pilot job on the west coast of the country.

In 1999 I started at Limfjorden Pilot with base in Thyborøn, a fishery port situated only 20 minutes' drive from the town where I was born. Since then I have worked as Pilot in many areas of the country with a large variety of ports and ships sizes and with a period as chief pilot as well. Today I live close to Svendborg on the small island Thurø, and my job as pilot consists of coastal and deep sea piloting.

I have been engaged in the political work since '99, I'm President of the Danish Maritime Pilots Association besides my Vice Presidentship in EMPA.



New Journal Editor

I was born on May 9th 1977 in Ostend, Belgium.

My father was a marine officer and my mother a housewife. During my youth I grew up in a maritime environment, my father was then pilot on the Congo river and became a Belgium sea pilot. In this way I got to know the life of a pilot.

I studied 4 years at the Flushing Maritime Academy and 2 years at the Nautical High School after which I started my career at sea with the Dutch gas tanker company 'Anthony Veder'. After a few years I moved on to the Belgian gas company Exmar. I served on the LPG fleet and made a career up to Chief Officer and later on Chief Officer on LNG tankers.

During the last years of my sea going career, I was in charge of several STS transfers on LNG carriers, and several projects at the office of Exmar. All of this was a great experience.

Finally I applied for the Dutch Pilot service in 2012 to become a pilot in 2013.

In the beginning of 2015 I was asked to take over the position of Journal editor for EMPA. I was proud and pleased that I was given the opportunity to take over this position from my father as Journal Editor.

It is my intention to continue the good work and serve the Board of EMPA the best way I can.

Capt Olivier Allaert
Journal Editor EMPA



Capt Olivier Allaert
Journal Editor EMPA



From left to right : Olivier Allaert, John Dalli, Dirk Vael, Stein Inge Dahn, Mike Morris, Miguel Vieira de Castro, Bjarne Cæsar Jensen

Resigning Vice Presidents



Roberto Maggi, La Spezia
Vice President 2009-2015

Capt Willem Bentink, pilot in Amsterdam-IJmond, and Cpt Roberto Maggi, pilot in La Spezia, stepped down as Vice-Presidents of EMPA.

Willem gave shape to the position of Vice President Communication and will be remembered for his clear internal and external communication and his flowing style of his presentations during the meetings.

Roby gave an interesting insight in the developments of pilotage organisations and their sensitivities in the Mediterranean Region. We shall never forget his sense of humor.



Willem Bentink, Amsterdam-IJmond
Vice Presidency 2011-2015

We are grateful for their contribution during their years in office. We wish them all the good luck in their future careers. Both were awarded with the EMPA medallion.

Resigning Journal Editor

Capt. Roger Allaert has been the Journal Editor of EMPA during the last 10 years. During this period he succeeded in making the Journal a publication of reference.

Next year he is retiring as a pilot on the river Scheldt Entrance.

During last General Meeting Capt. Allaert was awarded with the EMPA medallion.



Former leader of the Association of Maryland Pilots died in Annapolis of a heart attack.

Article Baltimore Sun Newspaper



Michael Robert Watson, a longtime state and national maritime pilot leader who had a key role in the dredging of the Baltimore port shipping channel, died of a heart attack July 23 at his Annapolis home. He was 72.

Mr. Watson, the president of the American Pilots' Association in Washington, had previously held the top post at the Association of Maryland Pilots for two decades. The national group represents groups of pilots in every state and three that operate on the Great Lakes. Its members pilot more than 95 percent of all international trade vessels navigating U.S. waters.

Born in Washington, D.C., he was the son of Richard L. Watson Sr., a farmer and federal government official, and Lois Hogan Watson. He was raised in McLean, Va., and was a 1961 graduate of McLean High School, where he won science awards. He graduated from the U.S. Merchant Marine Academy at Kings Point, N.Y., in 1965. He then was commissioned into the Naval Reserves. He served on Military Sealift Command ships and supplied troops in South Vietnam. He left military service as a lieutenant.

"Captain Watson was a true friend to pilots throughout the U.S. and the world," said Paul Kirchner, the American Pilot Association's executive director. "He was a strong advocate and steady voice for the piloting profession. He worked tirelessly to find ways to enhance pilotage requirements and standards, as well as to advance the standing of pilots within the maritime industry."

In 1970 he joined the Association of Maryland Pilots. He became a full licensed pilot in 1974 and was elected president of the group in 1982. Captain Watson served as president until 2000, when he was elected to serve as president of the American Pilots' Association. He was re-elected in 2004, 2008, and, most recently, in 2012.

"My father had many accomplishments, but above all, he was a family man. He made us feel like we were the most important people in the world," said his daughter, Natalie Watson of Tinton Falls, N.J.

Mr. Watson, who was known as Captain Watson as a bay pilot, was called a "voice of reason" as an advocate for the Port of Baltimore. He was named the 1988 Port Leader of the Year.

"Captain Watson was instrumental in making it possible for big container ships calling at Baltimore to use the Chesapeake and Delaware Canal," said a 1988 Sun story. "The pilots' association under Mr. Watson worked closely with the Army Corps of Engineers to make the canal safer for larger ships."

He also was a key leader, The Sun story said, in winning approval from the federal government for the dredging to deepen the port's channel to 50 feet.

"Mike was the one who worked with me to get the 50-foot channel," said former Maritime Commissioner Helen D. Bentley. "He was a very hard hitting, stubborn guy. Even though we were good friends, we would argue on items more frequently than not. But he was persistent and insistent. That's why he was elected national president."

In 2002 he was elected vice president of the International Maritime Pilots' Association and became its president in 2006. A month after the terrorist attacks of Sept. 11, 2001, Watson testified before a Senate committee examining security of foreign ships entering U.S. waters.

Under normal circumstances, an APA member pilot is the only U.S. citizen on a foreign ship moving in the fragile port and waterway system that is the lifeline of this country. "In the traditional state pilot system, pilotage is a public service," he testified. "Pilots are frequently referred to as the eyes and ears of a port and they are in a unique position to detect suspicious or unusual activities."

Family members said he worked with Congress, the Coast Guard, NOAA and the Army Corps of Engineers on legislation, policies and initiatives that increased navigation safety and facilitated the efficient flow of commerce.

Interested in finance, he was a chairman of the Baltimore Branch of the Federal Reserve Bank of Richmond. He also was a director of First Mariner Bancorp., was most recently chair of its board.

He was awarded U.S. Army Corps of Engineers Commander's Award for Public Service, Outstanding Professional Achievement Award from the Merchant Marine Academy, Maryland Governor's Citation, and the U.S. Coast Guard Certificate of Merit.

Family members said he enjoyed sailing and fishing with them off the Thomas Point Light. He was also a hunter. Services will be held at 10 a.m. Saturday at All Hallows Chapel, 864 W. Central Ave., Davidsonville.

In addition to his daughter, survivors include his wife of 45 years, Geraldine Pitts Watson of Annapolis; another daughter, Alicia Watson of Annapolis; a brother, Richard Watson of Romney, W.Va.; a sister, Patricia Lewis of Solomons Island; and a grandson.

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In Memoriam

Captain Michael R. Watson

With deep sadness we have learned that our good colleague, President of the American Pilots' Association Captain Michael R. Watson passed away on 23rd July 2015, at the age of 72.



We learned to know Michael as a distinguished leader of international pilotage, first of all through his service as President of IMPA, The International Maritime Pilots' Association for 8 years, until he stepped down after completing his second term last year.

Before becoming President of IMPA, he was Vice President of our international sister association since 2002. When passing away, Michael was serving President of the American Pilots' Association, a position he has held since 2000. He was a Chesapeake Bay pilot for more than 45 years.

Michael was a pronounced leader of international pilotage. Few in the maritime community could be unaware of his views, nor of the policies of the associations that he represented so excellently on the international arena. As an example, the sound message in this quote from one of his numerous speeches and papers will certainly prevail also in the future:

A compulsory pilotage requirement is by far the most effective mechanism available to a government to protect its waters, assure the safety of its people and environment, and to facilitate waterborne commerce. It is effective because it places on the bridge of a ship an individual whose purpose in being there is to protect the public interest. When a pilot has to compete for ship assignments, particularly assignments from a shipowner or other entity that promotes competition, the pilot knows that his or her livelihood depends on acting in the interests not of the government and its people but of the person who controls the selection of the pilot. When a pilot's role is compromised in this fashion, the purpose of the compulsory pilotage requirement is frustrated.

-Michael R. Watson, June 2007

Michael was a great friend of European pilots. This affection was not least demonstrated through his numerous visits to Europe and to EMPA's General Meetings. Even after stepping down as President of IMPA, we had the sincere pleasure of having Michael and his wife Geraldine as our guests at this year's General Meeting of EMPA in Estoril, Portugal. Only three months before he passed away, he then once again contributed with his friendship and his wisdom in strengthening the cross-Atlantic relationship of international pilotage.

We express our warmest sympathies and heartfelt condolences to Geraldine and the rest of Michael's family, and to all our American colleagues.

Stein Inge Dahn
President of EMPA



EMPA Position Paper Port Policy

4th May 2015

EUROPEAN PILOTSWARN AGAINST A LIBERALIZATION OF PILOTAGE IN THE PORT SERVICES REGULATION

The European Maritime Pilots' Association (EMPA), is a non-profit association with a membership of more than 5000 marine pilots from 25 coastal states in Europe including Norway, Turkey, Georgia, Russia and Ukraine.

On the 5th of May 2015, the Transports and Tourism (TRAN) Committee of the European Parliament should start the examination of the Port Services Regulation, presented by the European Commission on May 23rd 2013. This proposal introduces the application of the "freedom of services" principle to ports services, including pilotage. Such a reform of pilotage organizations would entail a number of negative consequences, the most serious of those jeopardizing maritime safety, security and protection of the environment.

This initiative is very surprising whereas the European Parliament prevented from the liberalization of maritime pilotage in 2003 and 2006 and whereas pilotage services in the EU gather a very high level of satisfaction. However, EMPA welcomes the Commission's initiative concerning financial transparency and considers this as an essential aspect for the development of European ports.

EMPA is asking for exclusion of pilotage from the chapter on liberalization (chapter II) and maintaining of this service in the chapter on financial transparency (chapter III).

Pilot services : Specific technicalnautical and local public services

The pilot works with the shipmaster to ensure the safe navigation of the ship and is directly involved in nautical decision-making on board ships. Pursuant to existing EU rules, pilots fulfill an essential role in the detection of ship's deficiencies and other hazards to navigation. For these reasons, it is unacceptable that a pilot would have to act under commercial pressure. The prime obligation of pilots is to provide a critical public safety service by ensuring the careful and free flow of all traffic within their pilotage area, thus protecting the environment.

All over the world, coastal States consider compulsory pilotage to be a local public service¹.

Indeed, the International Maritime Organization (IMO) in its resolution A.960 recommends that pilotage should be the responsibility of competent national and local authorities.

¹ Resolution n°A960, January 2004, International Maritime Organization.

EU Port Policy

Pilotage is a strictly regulated activity and it is widely acknowledged that such safety service cannot and should not be subject to a market-driven approach and free competition logic. Pilotage is not a commercial enterprise, but an essential public service. Collisions of vessels and other accidents near or in port waters can have tremendous negative consequences for human life, the economy and the environment.

It is important to highlight that in Europe, the pilots' status and tariffs are defined by public powers. Thus in most cases, pilotage tariffs are proposed by local public authorities, after consultation with port's users, port authorities and sometimes pilots. This public regulation is an efficient safeguard against any infringement to fair commercial practices.

Better answer to growth in traffic

The European Commission bases its proposal on the expected growth in traffic, ship dimensions and carriage of goods. These developments, which are indeed likely to take place, warrant additional and stricter measures to ensure the safety and smoothness of port traffic and certainly not liberalization measures. Current organizational patterns have proven to be perfectly capable of coping with the trend towards larger ship sizes and increased port throughput.

Ensuring a very high level of maritime safety, security and protection of the environment is even more important when EC expects growth in traffic, ship dimensions and carriage of goods. Indeed, all those factors would warrant extra and stricter control by pilotage services to satisfy the requirements of maritime safety and security which need to be reinforced to avoid the increased risks of accidents.

EMPA regards this EU Regulation as a threat to the high level of service currently provided by EU maritime pilots.

Liberalization economically inefficient

It is a fact that among the numerous competitive factors between the ports, the one which takes precedence is the geographical destination of goods. Knowing that pilotage represents only 5% or 6% of the cost for maritime economic operators, the price of pilotage has very little effect on the choice of port used by the concerned ship owners and economic operators. Consequently, the measure of liberalization will have little significant impact on the current state of affairs with regard to maritime traffic.

Moreover, studies carried out following the opening up to competition of pilotage services in a small number of Member States and in certain non-EU countries clearly show that the liberalization of pilotage does not lead, as in other sectors, to a decrease in pilotage rates. On the contrary, in certain cases, we have seen huge increases in rates: 20% in Denmark and 100% in Argentina. This is explained by the disappearance of economies of scale due to the exponential increase in the investments required to accomplish pilotage missions in the safest possible manner.

EUROPEAN MARITIME PILOTS' ASSOCIATION

**Current status and updates on changes in Europe
are available on the website**

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TOTAL CONTROL



QPS Qastor

QPS Qastor is Electronic Chart Software (ECS) that enables navigation, piloting and precise docking, as well as several other application such as Oil & Gas FPSO/SPM mooring, patrol vessel and tugboat operations. First introduced in 2000, Qastor has continued to be developed and enhanced, and now includes an wealth of options and features specifically the result of extensive use in canals, ports and riverways around the World. Using wired or wireless methods, Qastor interfaces to most devices outputting NMEA data strings, to AIS units.

Fleet Tracking and Route Management

It's not just mariners on vessels using QPS Qastor, a number of harbour masters and most recently fleet operation managers use QPS Qastor and the QPS Connect Server and Client for round the clock monitoring and alerting. QPS Qastor Connect Server also supplies meteorological data, VTS targets and ENC updates to QPS Qastor users.

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49th GENERAL MEETING

Enhanced safety through the use of real-time dynamic charts overlays

By Captain Jonathon Pearce
Business Development Manager at OMC International

In today's economic climate, ports need to maximise their efficiency while ensuring safety of passage. As vessels increase in size, the dilemma facing many ports is that their existing static underkeel clearance (UKC) rules are inflexible, thus deeper vessels cannot transit without compromising safety.

The problem is that static rules do not change with the environmental conditions, so the actual clearance, and the potential of vessel grounding, varies on any given day; for this reason static rules need to be conservative. The majority of authorities in the world use static rules to determine the underkeel clearance and they normally use the vessel's draught as the baseline, however it is contended that this method can be erroneous as it is based on the assumption that this clearance is sufficient, regardless of the prevailing environmental conditions.

So in practice, the actual safety clearance is determined by the conditions on the day, and under static rules, the clearance for a vessel varies for every transit. Most of the time the static rules will be conservative, but evidence shows that up to 5% of transits are marginal, even unsafe.

In contrast, dynamic UKC systems, calculate the required UKC depending on the prevailing environmental and vessel conditions; this ensures every transit satisfies appropriate risk standards. With safety assured, economic and efficiency benefits are realised when conditions allow deeper draughts and/or extended tidal windows.

Dynamic under keel clearance systems (DUKC®) calculate real time under-keel clearances to maximise channel safety and it considers all factors that affect the UKC to determine the minimum safe UKC requirements. Instead of using the vessels draught as the baseline, it implements a pre-determined safety limit which must not be breached. Tidal and channel variances, vessel dynamic movements, which are modelled using real-time (and predicted) environmental conditions, are added to this limit and this results in a minimum transit water level that is required to ensure safety at all times.

Users gain an advantage of DUKC® systems because enormous economic benefits can be gained when environmental conditions allow. This is achieved by reducing the inefficiencies (conservatism) inherent in the static rules and allows safe transits outside the restrictive static rules. This increases productivity of the port with deeper draughts and larger tidal windows; ship operators (owners/charterers) indirectly benefit because cargo is maximised for the vessel, but still with ensured safety.

The methodology behind dynamic underkeel clearance has been internationally recognised. The improved certainty, and information, that dynamic systems can deliver has seen regulatory bodies regard such systems as an essential Aid to Navigation (AtoN) and consider DUKC® as an effective risk mitigation tool. For this reason AMSA has installed a DUKC® underkeel clearance management system in Torres Strait to manage transiting vessels and is now mandatory for all deep draft vessels. This is the first coastal waterway in the world to have a mandatory UKC risk system, and other regulators are looking to implement similar risk management systems for their waterways. It should be noted that the ship does not need any additional equipment, as the system is installed ashore and can be remotely accessed through existing communication equipment.

Static rules

Traditionally, authorities have utilised static rules to govern the minimum UKC to ensure the safe transit of a vessel. These static rules were devised when vessels were smaller, their speeds lower, ship/shore communications poor and technology generally unavailable to determine ship motions accurately. There needed to be a simple method of calculating a safe underkeel clearance and the accepted practice was/is to calculate the underkeel clearance as a proportion of the vessels draught. The most common clearance ratio is "10% of draught", but this is unfortunate as the PIANC guidelines state that this is a minimum suggested safety clearance, and is for calm waters only, which may be unsafe in many ports today.

The static rule tries to capture all anticipated factors in a single allowance. Essentially, the only controllable factors are the tide height (transit time) and speed (which determines the amount of squat). Therefore, where depths are critical and conditions variable, there may be times when the allowance is marginal.

It could be suggested that the "**static rule**" approach is a "**top-down**" approach, where the gross clearance is determined from the draught, but the actual net underkeel clearance is unknown.

Some ports try to assess some of the factors, and whilst some of these factors can be pre-calculated, predicted wave response (in real time) is impossible to calculate without significant processing power and access to environmental data; so in practical terms wave motions are undeterminable once a transit commences.

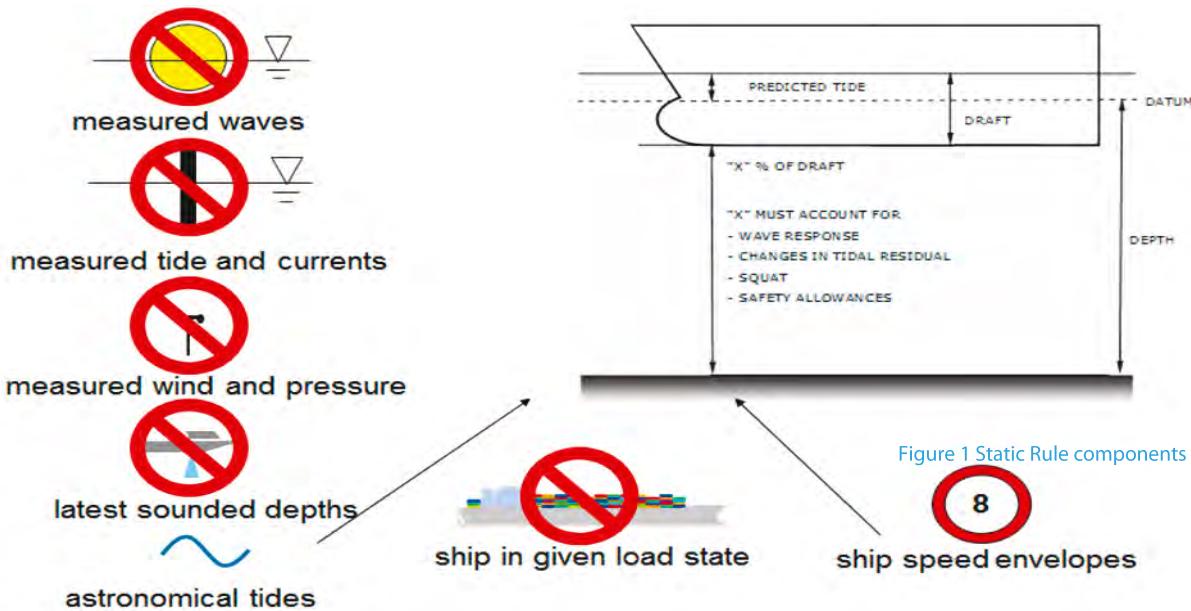


Figure 1 Static Rule components

Speed is an absolutely critical element in maintaining safe

UKC. Evidence has shown that vessels do not always maintain the planned, or proceed at an appropriate, speed for the transit. If the transit is too fast, the ship will squat in excess of the predicted amounts which is approximately proportional to the square of the speed; and if the vessel transits slower than planned, it will not reach way points at required times so may have less water than predicted and the transit may now be unsafe. Once underway, changes to UKC can be difficult to assess and are often overlooked.

Another problem is that many authorities use a generic squat formula, but there are many formulae in existence and the most appropriate formula depends on the bathymetry, channel design and the type of vessel. Squat is often calculated for a single critical point, but in practise a vessels' squat is continually changing throughout the entire length of the transit.

The biggest drawback with static rules is that they have to cater for the worst case scenario; they cannot be too optimistic as safety could be jeopardised, but cannot be too conservative, as they become uneconomic; so they are blunt compromise. The actual net clearance is wholly reliant on the environmental and transit conditions, and static rules are unresponsive to change.

This means an authority cannot maximise efficiency when conditions allow but more worryingly, an authority will be unaware when conditions are actually unsafe because, when static rules are used, the level of risk is variable and the net underkeel clearance on any particular transit is unknown.

Dynamic allowance

By contrast, dynamic underkeel clearances are determined in real time and are based on the actual vessel and its stability parameters, the prevailing met-ocean conditions (wave height, period and direction, water levels, currents, tidal plane, wind), vessel transit speed and waterway configuration, including detailed bathymetry, for the time of transit.

Dynamic systems can be considered as a **"bottom up" approach** and **the system has, at its core, minimum limits that must not be breached.** Every factor is computed and then added until the minimum tide height is found that ensures a safe transit. Thus, when conditions are favourable, vessels may have greater tidal windows and/or can sail with a deeper draught; but when conditions are not then tidal windows are reduced and may even be closed, or a vessel may be able to proceed but with a reduced draught.

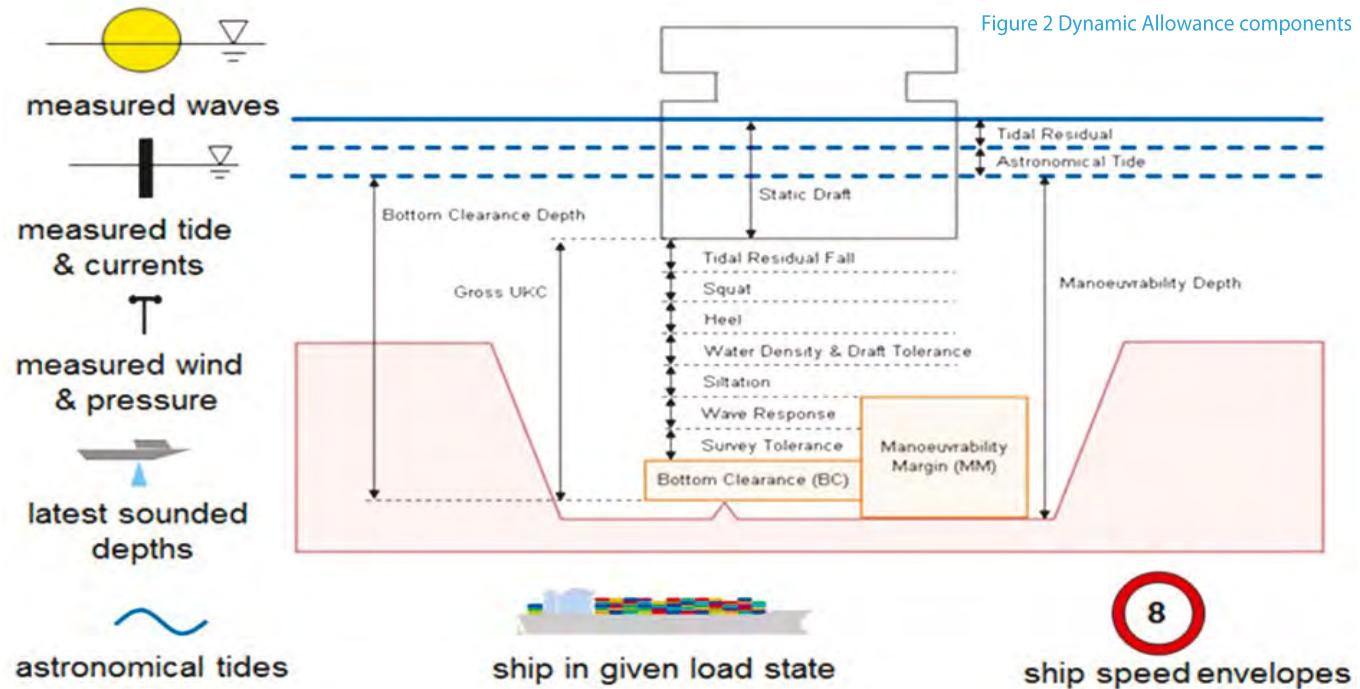


Figure 2 Dynamic Allowance components

Enhanced safety through the use of real-time dynamic charts overlays

Environmental conditions, ship speed and water depths continually vary along the transit; therefore net clearances need to be continually computed and updated to determine the UKC factors. The system is predictive, so if a navigator wishes to adapt his transit plan, or if there is an unforeseen event (e.g. an engine issue or berth congestion), or there is a change in the environmental conditions, the system will automatically update the calculations.

Integration of the sophisticated numerical calculations with real time environmental data ensures integrity, and quality, that cannot be matched by a static system; clearances are calculated individually for every ship.

The channel characteristics, for the whole transit, are combined validated numerical models to ensure accurate vertical displacements for the vessel type, size and stability condition. This integrates an appropriate squat formula for the vessel and channel and includes the effect of temporal and spatial variations of tidal currents during the transit.

Therefore every installation has to be fully customised because each port, its environmental conditions, and its trade are unique. This includes high resolution multi-beam survey data that is in greater detail than is typically available from a standard ENC or navigational chart. The DUKC® is always operating on the latest available hydrographic depths, and includes a daily accumulative allowance for siltation when available. For this reason a dynamic

system satisfies, and often exceeds, the internationally-accepted levels of risk for safely managing the UKC of vessel transits.

Dynamic Underkeel Clearance Systems (DUKC®)

DUKC® is a proven safety and risk management technology and is a recognised core e-Navigation concept. The first DUKC® system was created for Hay Point coal terminal in 1993 and the technology has now been installed in over 21 ports.

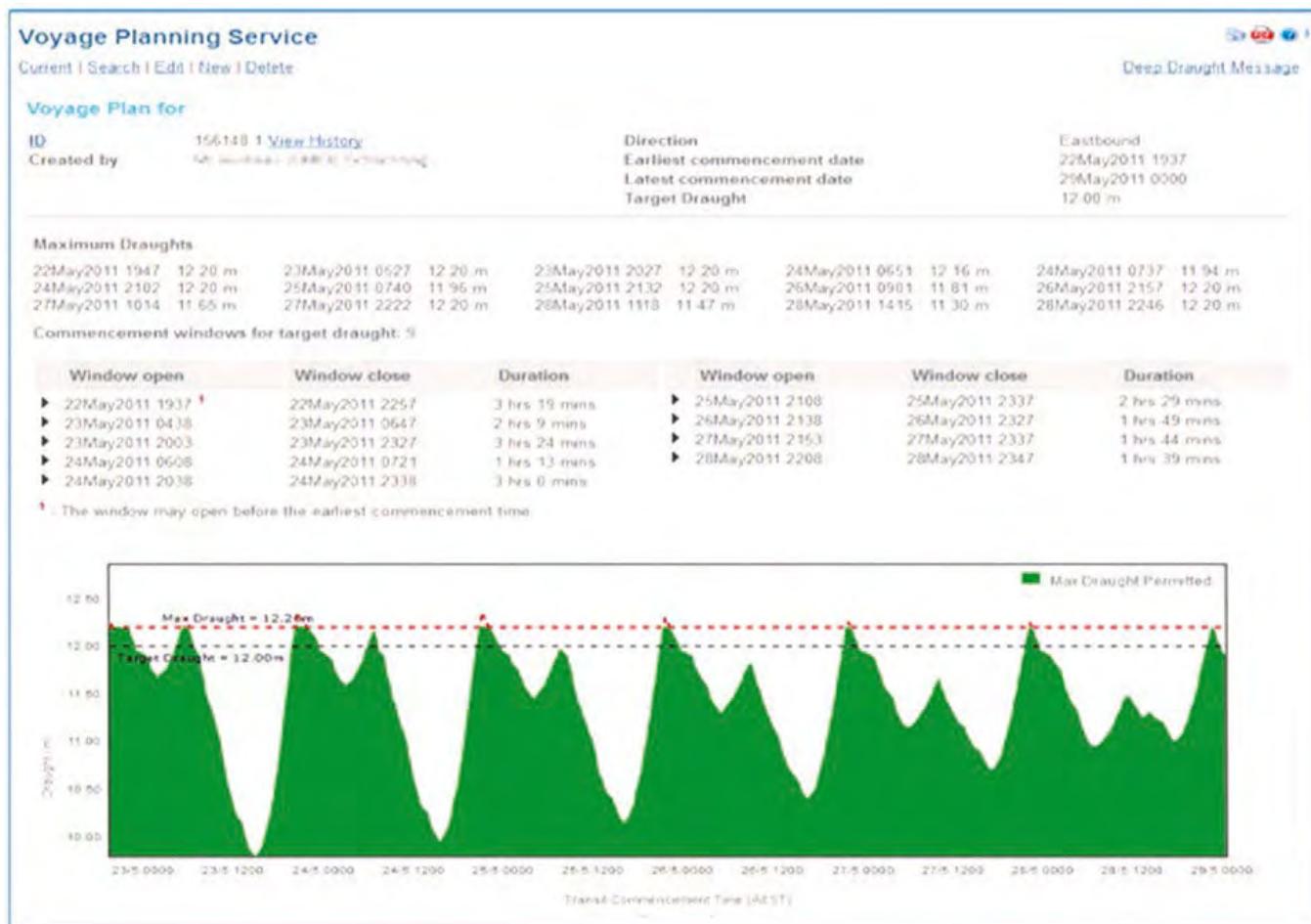
The system is customised for every port or waterway and implements the "dynamic allowances" mentioned above. The core functions of DUKC® systems have always been to provide ports and users with dynamic passage planning advice on:

- Maximum draft for tides
- Earliest and latest sailing times (tidal windows)
- UKC for specific transits.

The system provides comprehensive reports for ports and pilots, which improves the decision making process and enhances the master pilot information exchange. It also serves as a historical database for auditing and risk analysis purposes.

Examples of the information from the voyage planning service, which provides advice and maximum draughts and tidal windows, can be seen in Figure 3, and the transit planning service which allows for speed (squat) adjustment and information on calculated keel elevations in Figure 4.

Figure 3 Voyage Planning Service - Max draughts and Tidal Windows



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- Seamlessly tracking GPS+GLONASS (17-20 satellites in view)
- 1-2 cm Positioning of Bow and Stern
- 0.02 kn speed control of Bow and Stern

Since 2005, AD Navigation has been supplying PPU systems to demanding pilots worldwide. The new State-of-the-art ADX XR technology is the perfect PPU tool for the pilot that wants to be 100% independent of the ship instruments and crew. Unmatched performance makes ideal for applications such as:

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Enhanced safety through the use of real-time dynamic charts overlays

Figure 4 Transit Planning Service - Transit and Speed Assessment

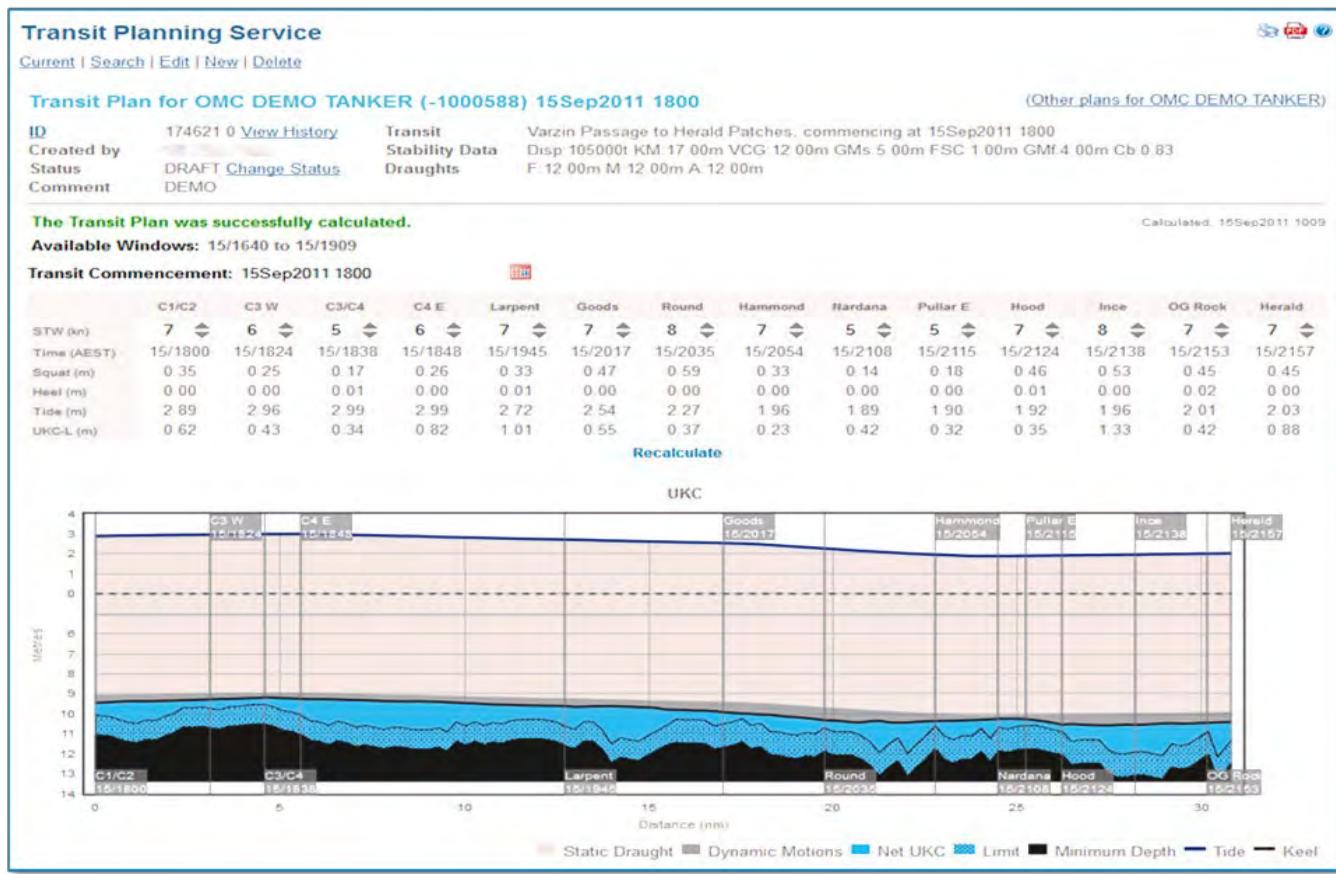
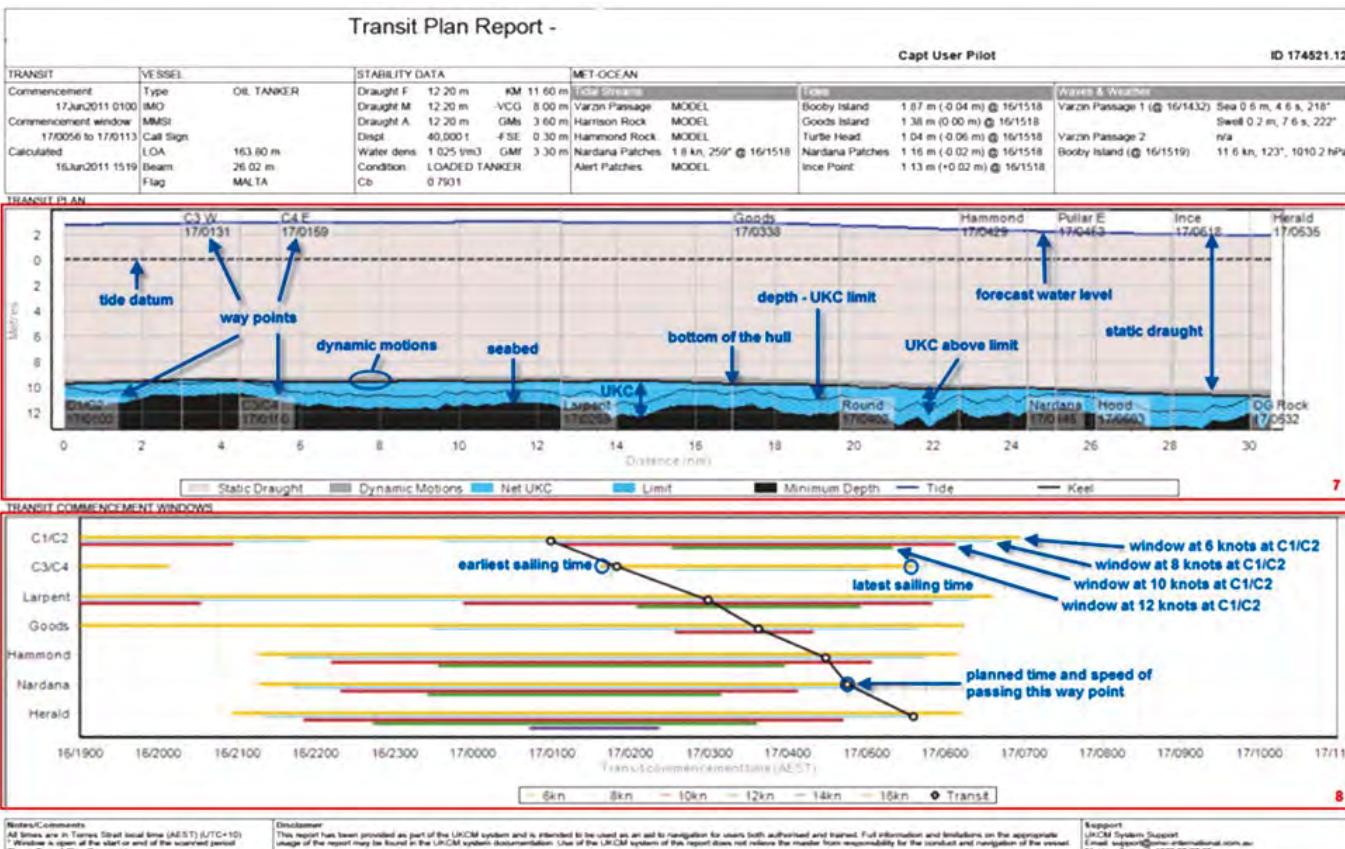


Figure 5 Overview of transit information report



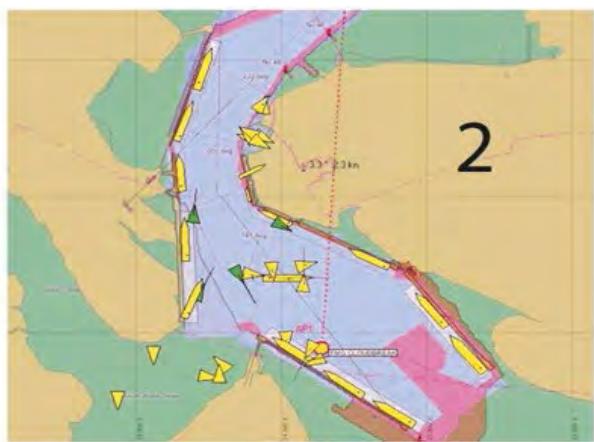
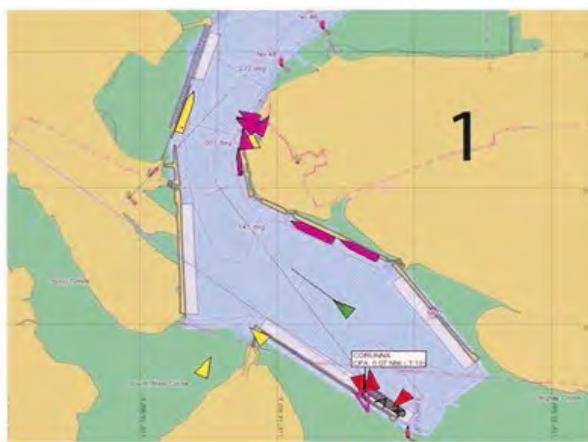
Enhanced safety through the use of real-time dynamic charts overlays

Whilst these functionalities remain at the core of the DUKC system, there is a growing requirement to deliver dynamic information in a format that is readily understandable. Through consultation with the maritime community chart overlays have been developed as they can be readily incorporated into the pilots' portable pilotage unit (PPU), and potentially on an ECDIS. Chart overlays present a simple visual indication on which areas meet UKC limits, and are safe for traversing, and which areas do not meet UKC limits, and should be avoided.

The information is displayed geospatially through a Marine Information Overlay (MIO) on a compatible Electronic Charting System (ECS) and, in parallel; the overlays are available on the web within the DUKC portal, allowing a shore station to view the same dynamic overlay that the ship handler is viewing.

An example of the chart overlay is displayed in Figure 6. The simple presentation of predicted Go / No Go areas for the time of the vessel arrival in those areas allows the pilot to anticipate required deviations from the transit plan. This anticipation allows time for various options to be considered and enables proactive rather than reactive navigations.

Figure 6 Actual PPU displays with overlays on/off and differing tidal conditions



Port Hedland examples:

1 – PPU with no overlays

2 – Overlay on showing safe/unsafe (Go/No Go) areas

3 – Contrasted overlay at mid tide

Future developments

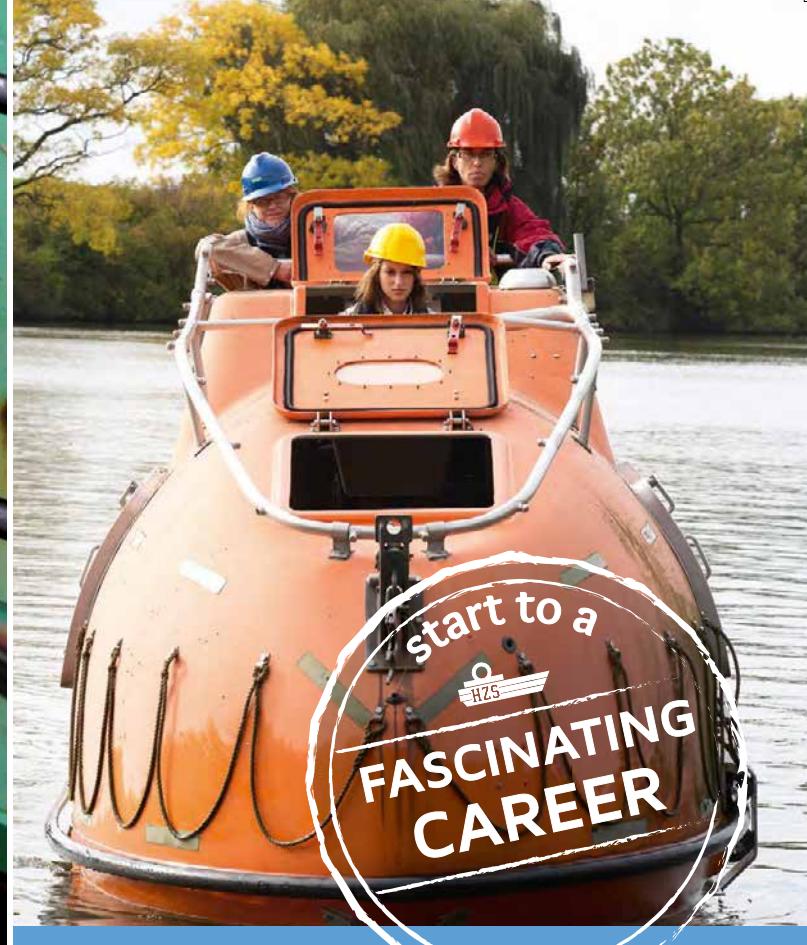
Chart overlays will be an important component of any e-Navigation system. The type of data that could be communicated is diverse, and it is probable that it will revolutionise today's navigational practices.

Dynamic chart overlays are already well established, and whilst they are presently being delivered by geotifs via 3G, any recognised overlay format and communication channel could be implemented. Implementation of the S100 standard is very likely to benefit the delivery of this information to a ship's ECDIS, or other navigational systems, rather than just the pilot's PPU, and the proposed VHF Data Exchange System (VDES) will also be an important/necessary development as data requirements increase.



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Conclusion

The use of static rules at many ports needs serious consideration about whether they are suitable, and if all factors are understood. The paradox of the static rules is that without an incident a port's static rules may appear validated and considered safe. In reality, where underkeel limits are critical and conditions variable, there may be times when the clearance is marginal and the port has experienced an unknown "near miss".

Dynamic underkeel clearance systems ensure safety through accurate planning and continual monitoring of the UKC of large vessels during transit along shallow waterways. These decision support tools and the integration into navigation systems, also allow the effect of alternative speed/sailing options on UKC to be quickly investigated by pilots and masters in situation where the passage does not proceed as planned. It does not need additional ship equipment as existing infrastructure can be used to access the information, however the level of information that can be delivered will benefit from newer technologies such as S100 charts.

Dynamic UKC chart overlays are an evolutionary step in delivering UKC information to the navigator in a visually understandable format. It is an operational and proven eNavigation solution that can only increase the safety of vessels.

Bio

Jonathon Pearce joined BP as a cadet in 1979 and qualified as a Master Mariner in 1990. He has served as master on high speed ferries before returning back deep sea as chief officer. In 1994 he came ashore as pilot in Port Taranaki, New Zealand. In 2006 he returned to the UK as a risk assessor and undertook numerous formal safety audits of UK ports, and risk assessments on LNG projects.

In 2008 he joined OMC International as their Business Development Manager and Senior Pilotage Advisor due to his extensive knowledge of their DUKC systems as a user. He is a recognised expert in underkeel clearance issues and ship squat and presents nationally, and internationally, at maritime conferences.

Editor's Note: Captain Jonathon Pearce is Business Development Manager at OMC International.

49th GENERAL MEETING

Report : Capt Roger Allaert

Round table discussion with stakeholders “Together we Challenge the future”

Chairman : Willem Bentinck (WB)

Panel : Isabelle Ryckbost – ESPO Secretary General – Video message

Carl Durow – Intern. Group of P&I Clubs – Pilotage Subcommittee (CD)

Carlos Vasconcelos – MSC Portugal (CV)

João Franco – Ports of Sines and Algarve Authority (JF)

Pedro Viegas Galvão – Shippers Council (PVG)

Fred van Wijnen – CESMA (FvW)

Lieselot Marinus – Director Shipping and Trade Policy ECSA (LM)

Marc Niederer – Managing Director Europe at Svitzer (MN)

Chairman Willem Bentinck



WB : Who are we? Let us look into perspective : what is shipping going to look like in 15 years from now : 2030. It is interesting to look back 15 years : What did it look like? Is efficiency more important (time pressure is more of an issue now than 15 years ago)?

A reply from Rotterdam pilots by Capt. Van Hoek : The role of the pilot is not only 'safety' but the issue should also be of an economic value we provide. We should not only focus on cost but on asset. The port is a link in the logistic chain. Pilots are an add value in the logistic part of the port.

WB : Do you think politicians are busy with safety or only with the fact how it can be cheaper?

LM : I know of the time when hipping was only 4 pages in the first papers of the EU commission. Now we have a revision of the white paper. Sometimes there is a lack of understanding between stakeholders. But now there is an initiative from Brussels regarding safety. We had the European shipping week, and I think we should do it together.

WB : Is it difficult to approach politicians?

A reply from Hans Hermann from Germany : We have to work close together with our politicians. This should be the case in the whole of Europe. Individual associations should try to influence politicians. President (SID) : We are trying to have a better understanding with politicians and work together with Port Authorities.

JF : As a Harbour Master we can say we are happy with the co-operation with the pilots in Sines. The cost is connecting to the quality of the service. Time and efficiency is important for commercial shipping.

FvW : More risks will be asked from the Captains in order to improve the profits. Pilots and Captains should stand together to set the limits to the risks they take.

MN : Safety should be the first qualifier. If it isn't safe you should not do it. Ships gets bigger and from there we should go into simulators to set the limits for safe operation.

WB : People in 2030 to man ship! A question for Capt. Fred van Wijnen : would you advise young people to go at sea for a maritime career?

FvW : Yes there are enough opportunities and the job of seafarer is

not the same as 20 years ago. Shipping companies should do more to keep the people at sea.

WB : What is holding them back? Children think they are limited to stay at sea until the age of 67.

FvW : Making a career at sea? There is nothing wrong with that!

WB : I have a question for Mr. Carl Durow. Do you prefer high qualified persons on board ships or cheap labor?

CD : To reply on your question of recruitment, you can not compare life at sea with the life ashore. There is more needed to keep them months at sea than internet access. Finding the right people is what is necessary. People who are technical able and motivated to go at sea. Through evaluation we have a continued impression that there is no link in accident whether there is a pilot on board or not. In technology there is a massive improvement . But at the same time it almost looks that pilots are less interested in what the Captain has to say but more interested in bringing the ship safely inside.

WB : Can you give us any figures on claims and incidents? Let us talk about claims above 100.000 dollars and caused by pilot error.

CD : In the period 1999-2007 I can give you an example : Italy : Incidents : 9 on a total of 633.600 Pilot manoeuvres meaning a 70.400/1 ratio which is almost meaningless.

USA : ratio 53943/1 on a total moves of 3,4 million moves!

Argentina : ratio 20491/1. Competition in pilotage is a concern for PPI

and is reflected in the figures!

Contacts with objects : overall 269 in the period 1999 – 2007.

21. Round Table – Stakeholders

Chair: Willem Bentink
Isabelle Ryckbost ESPO (video message)
Carl Durow International Group of P&I Clubs
Carlos Vasconcelos MSC Portugal
João Franco Ports of Sines and Algarve Authority
Pedro Viegas Galvão Shippers Council
Fred van Wijnen CESMA
Michael Jansen EBA
Lieselot Marinus ECSA
Marc Niederer Svitzer



WB : **Do you think a specific framework should be installed for PEC's with taking into account the local situation?**

MN : We have not specific comment on tugs and PEC's. We see that the service by PEC holders from IJuiden to Newcastle, where the Captain is doing the job every day, is satisfactory.

WB : **I am happy that you mention the IJuiden –Newcastle case. You must know that the PEC is withdrawn if the Captain has to take a tug to come alongside. This is because of the accident, some years ago, with a PEC holder using a tug, where the tug was overturned. This is imposed to protect the tugboat and her crew.**

LM : Lack of transparency & understanding why sometimes for safety reasons we can not have a PEC in one port and not in another port.

WB: **More transparency but also within a framework?**

LM : Safety is a prime concern, but competition should not always be detrimental for safety. We are also looking at the cost aspect.

CV : Competition should be possible in big ports like Antwerp!! We should look into the commercial markets. Monopoly ! We prefer public monopoly over private monopoly. Competition should not be a general rule but should be possible in certain areas.

JF : We do not want to change to competition because the system now is satisfactory. We need quality that is high and costs who are moderate/but in according to the high quality that is delivered.

PVG : For tugs in Portuguese waters we need different operations. Some are private, other are public like in Leixoes. That should also be possible in pilotage. We are in favor of a regulation because now we don't have it now.

WB : **Conclusion, we should have a high quality but the cost should be fair and in correct to the service provided within a transparent operation.**

CV : Competition is not an issue. Thorough co-operation is an issue. President (SID) : IMO-960 is clear, we must co-operate with the crew within the bridge team. It should be left to local authorities whether they have PEC's, taking into account the local environment. Malta does not have PEC's, and this must also be possible. We have seen

that the total cost went up because of competition. Transparency : we are for.

Fred Kuypers (NLC) : The fee for the pilot consists of 2 parameters. The first for the pilot equipment and the second for the pilot cost. It would be fair if ports and owners would share with us there information. We have to know how many ship movements we have to make in the future to know what equipment we need and how many pilots we need to have to deliver a good service at a fair cost. If we have that knowledge it will be much easier to assess your organization.

WB : **In 2030. How many ship movements will there be?**

JF : Ships get bigger, so there will be more cargo but not so many more movements.

FvW : We had an assessment of the outlook for the future and it says that there will be double amount of ships operating. Ships get bigger, but there will be more feeders as big ship will not be able to serve all ports.

WB : **It will be a major challenge for pilots if the number of movements will be double the amount now. Are ports willing to share the figures with the pilots?**

FvW : On the issue of competition I can tell you that if you keep up the quality, I can not see too many players taking your positions.

Bjarne CeasarJensen (Danmark) : We have competition in Denmark! And we even face more competition in January 2016.

Are we more efficient : NO

Do we have more accidents : NO

Do we have less accidents : NO

But, pilotage is 25% more expensive(and will go up).

It is ridiculous for a small market like in Denmark to open to competition. You have cherry picking, and this will become the issue. Industry is pushing efficiency. Not any of the benefits of competition has been seen. Transparency will go down because of the competition, because you don't want your competitor to know everything about your service.

It is NOT going to bring efficiency or safety.

Capt. Rusu Ieronim-Florin(Romania) : We are at the end of competition. The money went in the pockets of the owners. We had 23 different companies. They offered discounts to agents. We had many accidents and the price remained the same. Where is the benefit?

Next General Meeting

21 & 22 April 2016
Antwerp



News from Member Associations

United Kingdom Maritime Pilots Association

By Don Cockrill Chairman UKMPA



2014/15 Has seen mixed fortunes for Pilotage in the UK

Port management policies prioritising profitability over public safety and environmental protection, have seen pilotage services come under attack in some ports. In one Northern Irish port a long standing service based on a minimum of two and a half years training has been replaced by a few months training, provided from a consultancy run by a Humber pilot and a short simulator course at a college. Despite advice from the UKMPA the port has steadfastly disregarded A960 and the Port Marine Safety Code. What is of most concern was the inability of the Department of Transport or the Minister for Transport to legally intervene for the public good, clearly demonstrating that UK ports are free from any meaningful regulation in matters of Pilotage.

Despite this disappointment the UKMPA continues to make progress working with all stakeholders in the ports industry. We regularly meet with the Department of Transport and have now developed a good working relationship with them. We are also regular witnesses at the UK Parliament Transport Select Committee and had the Shipping Minister address our conference again. Something that would have been unheard of even a few short years ago.



In the UK there are no national standards or qualifications for pilots, each port is able to set its own standards under the pilotage legislation. As shown in the case described earlier this is a far from ideal situation with potentially disastrous consequences.

The UKMPA has been working with the ports industry training body - Port Skills and Safety (PSS) - for sometime now to develop a national pilotage qualification. A number of UKMPA pilots are on the expert panel that is developing this qualification. It is currently going out to stakeholder consultation, with the publication of the scheme scheduled for the end of the year. The scheme will not replace the current pilot authorization (license) scheme but will supplement it hopefully resulting in more standardization and protection of standards within UK pilotage.

In 2014 the UKMPA became an associate member of Ports Skills and Safety and is the only self funded professional body to become a member. All the other members being commercial Ports and Shipping organisations.

The EU ports directive (PP3) has of course been a focus for us all throughout the last year and the UK has been no different. EMPA Vice President, Mike Morris has been working tirelessly with his UKMPA and EMPA colleagues to secure the best outcome for pilotage in the PP3. Mike has used many political contacts within the UK to influence our MEPs as well as lobbying our Department of Transport and MPs.

To date all have been favourable to our position. Additionally, we have been joining forces with the UK ports organisations working against the imposition of other aspects of PP3 which runs contrary to the manner in which UK ports are operated generally.

Apibarra – Portuguese Maritime Pilot's Association

By Miguel Vieira de Castro President



Since our last report we have experienced substantial changes and we have moved from a competition threat environment to a more "peaceful" situation (actual situation).

As you all know we have been under financial aid from the EU and the IMF and the government has taken several measures to boost the economy, not only by their own, but also due to TROIKA terms and conditions for financial support, and this gave an excellent opportunity to have the other stakeholders lobbying really closely to the Government.

This resulted in several attempts to activate the Government will to concede concessions and to promote competition in pilotage services, culminating in the GT IEVA report promoted by "The Society" that has been implemented as the guidelines for investment and growth in ports and the other transportation sectors.

Under this significant threat, we asked for support from EMPA and IMPA which made all the difference, for the rather "calm" situation that we are living today. We had the opportunity to host the 5th APIBARRA conference where all the stakeholders were invited to address those present and explain their concerns. It can be quite challenging to invite your "enemies" to your house but it turned out very well. We had the honor of having with us our EMPA President and colleagues from France and Spain, who had the opportunity to show the stakeholders that pilotage services can be organized in different ways, but the aim is remains the same, all over Europe and the world: safety and efficiency in our ports.

During this process we were also in contact with other colleagues from other associations that gave us a lot of support and this, for us, is the main essence of EMPA, strong bonds and friendship.

Also, I would like to express my gratitude to our Secretary General and the BOD for always being there for the Portuguese pilots', especially during this recent process.

Recently we were aware of a report from the Competition Authority which stressed that there is no real competition within terminals and other port services and this can mean, again, competition in pilotage services. We really need to be vigilant! The "fight" is never over!

What are we going to do? We will attend all different meetings, being considered partners, offering(?) "solutions for the problems", being recognized by the stakeholders, and that is something that really makes all the difference. Recently we had the opportunity to listen to the President of one of the associations which mostly criticized the pilots (we were more or less the reason for the crisis in Portugal), to state on their 30th anniversary, that APIBARRA was among the associations that they considered partners working towards a better future.

I would also like to briefly mention Daniel Spínola Pitta who has stepped down after having been President for 8 years. Even retired he always played an active role in pilotage as APIBARRA President, and will continue to do so as our Honorary President.

Finally, a greater challenge will be the 49th EMPA General Meeting which is going to be hosted in Estoril. It is going to be a really important milestone for the Association with several recommendations from the 'Wise Men Group', which we have supported, and whose meeting we have attended in Barcelona with our Spanish colleagues.

Together we can challenge the future!

Malta Maritime Pilots Cooperative Society Ltd

By Albert Gambina



In 2012 the pilotage service agreement with the relevant government authority was further extended, providing stability and a mutually beneficial working environment. It is against this backdrop that we at Malta Maritime Pilots are confident that 2015 will continue to be a positive year confirming the trend of previous years. In 2014 we carried out a total of 8500 moves, an increase of 9.3% from 2013 and 2.3% in gross tonnage terms. This was achieved with a complement of 12 senior and 4 junior pilots and included an exceptional 16 oil rig movements. We are happy to report nil safety incidents for the two ports of Valletta and Marsaxlokk.

For the current year we envisage an increase in activity.

In Marsaxlokk, as a result of the investment made by Malta Freeport terminals in new quays and gantry cranes, the two main container line consortia, Maersk - MSC and CMA CGM - UASC - China Shipping will be increasing the frequency of their services utilising the largest container ships currently in operation.

In Valletta, unfortunate regional events have led to more cruise ships making Grand Harbour an alternative port of call. We have also noted an increase in the number of vessels making use of the port's ship repair facilities and drydocks.

With regards to training, Malta Maritime Pilots are involved in running the Mediterranean Maritime Training and Research Centre that includes a full mission simulator. In 2014 this entity obtained quality certification from DNV as well as approval from the Maltese government. This will maintain the standard of our continuing professional development and the safety of our ports.



Pilotage activity is an important element of the national security system of each coastal state, including Russia.

That implies that the national security and not the economy is a primary aim of pilotage activity.

The modern pilot provides safety of the biggest moving material objects ever created on earth by human beings. The objects often transporting tens and even hundreds of thousands of tons of dangerous goods in close proximity of coasts and in ports inhabited by millions of people. Providing the safety of a vessel, the pilot first of all serves the vital interests of the state and the population of coastal areas.

In whole the world pilots work normally within the public or self-employed pilot's organisations collecting pilotage dues to cover pilotage expenses. The amount of those pilotage dues should therefore be only based on the expenses that are necessary and sufficient for provision of efficient pilotage services. A particular feature of pilotage dues is that they are paid by shipowners and collected by pilot's organisations while the responsibility for the pilotage servicing of merchant shipping is the field of a national competent authority, for example in Russia, the Ministry of Transport.

The world knows many cases where pilotage is provided by non-public pilot's organisations belonging to pilots themselves and managed by them or by port authorities. But we are not aware of private pilot's organisations working for profit, since we believe in pilotage dues there should be no room for profit of the owners of private pilot's organisations.

Practically in all countries of the European Union, the pilotage services are rendered within the monopoly status irrespective of the mode of their ownership, i.e. be it public entities or self-employed pilot's organisations. In both cases the status of monopoly for pilotage is reflected in national maritime legislation, and the activity of pilot's organisations is supervised by a competent pilotage authority of the country, by the port or by city authorities.

Till 2001 more than two thirds of sea pilots of Russia worked in the non-lucrative self-employed pilot's organisations. All of them were members of the Russian Maritime Pilots Association (RMPA), which for many years was a member of EMPA and, as such, participated in the IMPA work. The RMPA represented interests of Russian sea pilots both in domestic and international organisations.

Since 2001, many modifications have been made in the organisation of pilotage services in Russia and, as a result, after 2004 more than two thirds of sea pilots of the country were employed by the Federal State Enterprise "Rosmorport" that inherited the state property of seaports, including the pilotage property. For the time being more than 650 sea pilots of Russia work for that State Enterprise, and it is the Rosmorport who provides Russia's international guarantee for the quality and a continuity of pilotage services in Russian ports.

The Rosmorport acts under the auspices of the Russian Ministry of Transport and is responsible for ensuring the technical safety of navigation in Russian ports.

The Rosmorport builds, reconstructs and maintains in a condition providing safety of navigation, the approach channels and water areas of seaports, and does so exclusively at its own means based on port charges collected and/or on subsidies from the federal budget.

The Rosmorport renders pilotage services to ships almost in 90 % of Russia's seaports, including those in the Arctic, where the Enterprise incurs all the expenses related to the upholding of necessary staff of pilots, irrespective of seasonal fluctuation of number of pilotage operations.

The Rosmorport applies the latest world achievements and advanced technologies in ensuring pilotage using modern equipment and preserving historical experience of pilots.

From 2012 to 2014 alone the Enterprise introduced 11 modern pilotage boats for a total amount of some 850 million roubles, currently delivering pilots in different seaports.

On November 21 2013, the Rosmorport with the support of the Ministry of Transport celebrated for the first time in a modern history of Russia the 400th anniversary of the oldest pilotage service of Russia in the port of Arkhangelsk, first seaport of the Moscow Russia. On that occasion a memorial and prayer service took place in the St. Nicolas church of Arkhangelsk in memory of all pilots, and a foundation stone was laid on the bank of the navigable river Northern Dvina on the spot of the future monument «Korabelnym Vozham Arkhangelska - to Pilots of Russia». In the evening a closing festivity took place in the Arkhangelsk regional drama theatre, attended by delegations from all pilotage services of Russia. A memorial edition of the book «Korabelnyie Vozhi Arkhangelska» (ship pilots of Arkhangelsk) published by Rosmorport to celebrate this anniversary, was handed over to all present.

According to the Merchant Shipping Code of Russia the purpose of pilotage is non-material, however the present-day legislation of the Russian Federation allows the operation in Russian ports of private pilot's companies, whose purpose is making profit.

Having enticed a part of pilots from public or former self-employed pilot's organisations, the private companies render pilotage service on a competitive basis and have managed to grasp the most profitable pilot's operations in large ports. Naturally, the proprietors of those private pilot's companies are not pilots any longer but simply businessmen who in most cases have nothing to do with the pilotage.

With due regard to the international practice of organisation of pilotage activity and given the results of unfair competition of the private pilot's companies, the Ministry of Transport made the decision: "about the need for modification of the current legislation and creation of a single national public pilotage service".

This decision is based on the need not to admit the competition for pilotage and the need for rendering guaranteed pilotage service of sufficient level for all ports of Russia without any exception with a view to ensuring social interests of coastal territories, protection of human life and the environment.

This decision is also based on the fact that the ship pilotage is part of a complex infrastructure of safety of navigation ensured by the state and, therefore, cannot be provided on market principles.

Since the main objective of the owner of a private company is making profit, he will surely get it by lowering the cost of the main items of expenditure or by reporting falsified expenses. As a result, this will objectively worsen the quality of pilotage service, and the shipowner will pay a higher price for a worse product.

The position of the Ministry of Transport of Russia - a competent pilotage authority of the country - concerning the organisation of ship pilotage service is in line with the basic principles that are common for all coastal countries. There are just a few countries among the great number of sea coastal states of the World who have legally admitted competition in pilotage, but experts in the field of safety of navigation estimate this experience as strictly negative.

Private companies that render pilotage service on a competitive basis, are not interested in informing state authorities about a poor condition of their clients' vessels since this may negatively affect their turnover profit. Thus, not only the price may become one of the competition parameters but also certain «exclusive contracts», especially with large shipowners.

This is unacceptable in the interest of society as well as for the social and economic purposes.

In the view of most experts in pilotage, the sphere of pilotage services is comparatively insignificant and the market mechanism of competition cannot, in principle, ensure a desirable result, i.e. diminishing the cost of rendered services, without the decline in their quality.

The market of pilotage services is insufficient for the healthy and viable competition between a large number of participants, since the positive effect of competition is usually shown only with a large number of market participants.

Services rendered by the private pilot's organization cost double or more compared to those rendered by the public pilotage body in the same port, as currently observed, which is a striking confirmation of the above-mentioned assertions, that cannot be explained from the point of view of the mechanisms of fair competition.

Emergence in one port of several competing private pilot's organisations affiliated with terminal owners, cargo owners and even shipping companies will require implementation of measures aimed at prevention of cartel agreements and monopolization of the market by private pilotage organisations. This will demand, among others, serious legislative endeavors, without however guaranteeing a success.

There are many more aspects of negative influence of competition in pilotage which are well-known both to the European and World pilotage community and which were meant by the Russian Ministry of Transport while making a decision on creating a single national public pilotage service in Russia.

In order to protect their interests and in opposition to the Ministry of Transport of Russia the proprietors of private pilot's organisations united in a non-commercial partnership «National Association of Pilot's Organisations». However, the pilots of Russia working both in public enterprises, and in the private pilot's companies, hope that modifications in national legislation will be adopted soon and the troubled times in pilotage of the country will be a thing of the past.

Prepared by:

The state sea pilot since 1974,

The head of the pilot's organisation of Sankt Petersburg since 1992,

President of RMPA from 1995 to 2007,

Adviser to the deputy Director General of the Federal State Enterprise "Rosmorport" on safety of navigation.

Danish Maritime Pilots Association

By Capt. Bjarne Cæsar Jensen President Danish Maritime Pilots Association

The year for the Danish pilots has been under strong influence of the proposed pilot act. Which unfortunately, passed through parliament without major changes compared to the original bill.

The association used a considerable effort to fight this, and despite the poor result, the fight was not in vain. We have managed to get a lot of fruitful contacts amongst parliament member and NGO's, which we continue to work with. We have made our points clear, and in the public we stand as the guardians of safety and environment at sea. In the backdraft of the legislative work, we managed to push the Danish Maritime Authority (DMA) to strengthen the control with shipping within the Danish waters.

The result of the pilot act is yet to be seen, as the competition first will be in force from January 1st 2016.

Meanwhile contractors are applying for license to conduct coastal pilotage (transit of the Danish straits). Licenses will be issued on July 1st 2015, so that they have 6 month to prepare themselves.

In the autumn, COWI, the same consultant that made the report on competition on behalf of us, issued by contract with DMA a report on the possibility of a test on shore based pilotage in Danish waters. We managed to get a good influence on this report, and we would like to thank all of you for the help and replies that you gave in the process. It's always nice to know, that you are amongst friends.

The conclusion was that it is not possible without loss of safety, and as this is unacceptable to us, we managed to make DMA admit the same. The economic calculations in the report, is in our opinion to optimistic and unrealistic. Shore based pilotage is in our opinion, with present technology, not possible.

The association has recently elected a new board of directors, and is revitalized with new members and energy.

At the same time we have said goodbye to Capt. Stig D. Thomsen, who, after 15 years as board member, resigned to attend to personal matters and is still a pilot for many years to come. I would like to thank "The Stig" for a duty well done.

Our struggle is not over, but with the help of good European colleagues and friends, we will prevail.

Capt. Stig D. Thomsen with the EMPA President during the 47th GM in Malta in 2013



Great Belt Bridge southbound passage



Romania—FPMR Euxin Pilots

By Capt. Ieronim-Florin RUSU



Romanian pilots are facing the same competition challenge as two years ago.

The two administrations, Maritime Harbors of Constanța, Mangalia and Midia and the Lower Danube river Administration are acting pilotage through private companies of pilotage adapting their work schedule one by one during one month.

There is no more competition apparently as there are no other providers at the same time but the existence of different models of organization is enough to prove the competition is real.

The last challenge in Romania is the Naval Romanian Authority initiative to change the rules for selecting, forming and continuous competence of the pilots, established here by the Minister of the Transport Order NO. 382/2007, which was already amended no more than one year ago. This initiative is the result of the requirements of some owners of two pilotage companies. Our association is confronted with some unrealistic proposals such as agreeing to change the rules without having the time to check if it is really necessary.

There are some strange proposals such as increasing the period of necessary practice and continuity before the exams of the new pilots or the extension of the pilots' competence. The clearest example is the proposal to double the practice period for apprentice pilots from 12 months to an uninterrupted 24 months, both for former tugboat captains and former sea captains. We think this is dictated only by commercial interests in order to inhibit the promotion of new pilots on the market and the apparition of new competitors. They tried to initiate authority rules instead of consulting the professional association.

The dynamic of changes makes it impossible to determine the result of the negotiations and the track that will be followed for the future project will be long enough before we will know the final outcome.

The only fact that we have to mention is the lack of stability of the rules.

Regarding the day by day activity of the Romanian pilots we can say it is better than it was in the free competition era, which ended three years ago. The safety of traffic has increased and the pilots are speaking with one voice, even if it is they are representing a single organization.



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Pilots in South Italy at the service of the most vulnerable



Since the migration from North Africa to the coasts of the southern Mediterranean has begun, all the Pilots Corporations of southern Italy have been involved.

Pilots are not directly involved in rescuing the castaways. Their task consists of manoeuvering all ships transporting the rescued people safely to port. This is done completely free of charge.

Apart from the now daily efforts of men and equipment, the biggest danger is the health aspect. Cases of scabies increase exponentially, and often the pilot has to force his way through these poor people crammed on deck.



Only last year the pilots of Southern Italy have assisted more than three hundred ships, and unfortunately, if a quick solution will not be found, these numbers will be subject to a sharp increase.

Thousands of migrants risk their lives in rough seas, as they try to reach Italy from Libya, amongst them reluctant travellers who were forced at gunpoint into rickety boats.

The surge in crossings at a normally quiet time of year suggests that plans to deter migrants by cutting back rescue operations have failed, precisely as aid groups had predicted. It is feared the summer peak may bring more loss of life.

The situation in Libya is so chaotic, no matter what policy we adopt, people are desperate to get away. Terrible tragedies will occur unless we put up search and rescue.

More than 3,200 migrants who were trying to reach Europe by sea are officially known to have drowned last year alone.

On a daily basis pilots continue, without any governmental aid, to help all these men, women and children who risk their lives for a better future.

By Cino Milani



Serious accident MV Star Grip



My name is Daniel Dequick. I am a Belgian River Scheldt Pilot, 58 of age. During my 27 years as a pilot on the River Scheldt, I only suffered two minor injuries..... Until 13th April 2015.

On that day I was ordered to pilot a vessel from the Kallo lock to Flushing. Vessel in the lock at 04.30 LT. The vessel was the "STAR GRIP", a gearbulker of 199m x 32m, in ballast and a draught of approximately 7m. The entire crew was from the Philippines.

When I boarded the vessel, an AB accompanied me to the bridge, and as there was no elevator, it was all the way by the stairs. I noticed that the last stairs ended directly into the wheelhouse. Except for the piece of rope, there were no security measures. Photographs 1 and 2 show the staircase. Notice the piece of rope, most probably the only 'security measure', although not used (note: the pictures show the starboard staircase, the issue here concerns the port staircase with almost the same configuration as shown in drawing 3)



When the barge was abeam, I decided to have a look through the side window near the staircase to make sure that the waves did fade out (pos A), but to see the meeting point I had to go a little bit to the right side of the window (pos B), without realizing I was so close to the staircase. I couldn't use the aft facing windows because the view was such that the meeting point would already be past as I could not get close enough due to the coffee-corner.

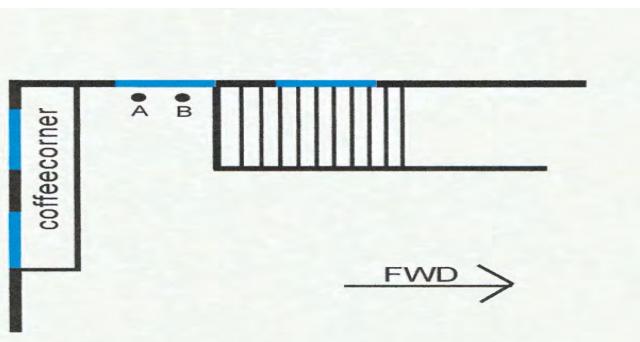
After having verified that everything was OK for the barge, as it did, I backed up a little and then made a turn over my right shoulder, still not realising the staircase - which was not secured - being so close. During the turning I wanted to put my right foot on the ground. Only, I didn't find the ground. Instead, my right foot was above the first step. Without having any grip, I fell down onto the platform at the bottom of the stairs.

Once down, I realized I was seriously injured. Luckily I was able to move my legs and I was conscious. I had been very 'lucky'! Two people who were on bridge, hearing that something went wrong, came to my rescue. They helped me to the bridge. I was in a lot of pain, mainly in the left side of my chest and the left shoulder-blade, I had trouble breathing and speaking, and I had a big bump on my forehead.



Around 05.00 LT, we left the lock and started our voyage to Flushing. The speed through the water was 12 knots. Although the speed was not too high, I noticed that a bow wave of approximately 0.5 to 0.75m was produced. These waves wouldn't affect the normal barges, but the barges loaded with sand (almost without freeboard) could encounter some problems with these waves.

Until half way, the traffic was very sparse as it was a monday morning. A couple of miles before Terneuzen, I noticed a sand barge going up the river. As the fairway is larger at this point, I decided not to slow down as most probably the waves would fade out by the time they would reach the barge.



Realizing that we were still sailing, we slowed down and I contacted 'Central Terneuzen' by VHF. With problems to speak, I made it clear that I was seriously injured and needed to be evacuated asap. As I told them that I was not able to pilot anymore, 'Central Terneuzen' decided, with my approval, to guide the captain to anchorage area 'A' in de 'Put van Terneuzen'.

Meanwhile, 'Central Terneuzen' took all the necessary actions to get a medical team on board that could assess the nature of my injuries.

The two rescue teams came on board without any delay. They decided that an evacuation by helicopter would be necessary due to the severity of my injuries. Meanwhile I got the first aid from the rescue teams.

Once the helicopter arrived, a Seaking from Koksijde SAR, I was strapped into the basket and hoisted on board (photo 4). As the nature of my injuries required immediate medical attention, it was decided to fly me to the nearest hospital with a helicopter landing area, hospital "Zorgsaam" in Terneuzen.

After several examinations, the following injuries could be determined : 7 fractured ribs, 3 injured vertebrae, and last but not least, a punctured and collapsed left lung. They kept me in intensive care for 9 days. I had to remain in hospital for two more weeks, before I was dismissed.

Today, I'm feeling fine although I still have to be careful when I move around. Climbing a pilot ladder is not an option for the time being. Only time will heal everything. By the 1st July I will start to work again, not yet on board ships but as one of the chief pilots in Antwerp, an office job.

To conclude, I would like to thank the people from 'Central Terneuzen' for their swift action, all the people from the rescue teams, the 'Patrol' from Multratug assisted by the 'Multratug 26' and the 'Zeemanshoop' from the KNRM in Breskens.

Vlaamse loads van zeeschip gehaald op Westerschelde

Fig.4



Het was een spectaculair gezicht, maandagochtend rond half tien op de Westerschelde even ten westen van Terneuzen. De Vlaamse rivier-loods aan boord van het Noorse zeeschip Star Grip was van een trap gevallen. Hij had zich daarbij dusdanig verwond dat medische hulp nodig was. De Multratug 26 van sleep- en bergingsbedrijf Multratug was als eerste ter plekke, waarna al snel het hulpverleningsvaartuig Patrol, ook van Multratug, volgde met een arts die de man in een helikopter naar Terneuzen waren gebracht. Ook de reddingboot Zeemanshoop van de KNRM in Breskens schoot te hulp met medisch personeel aan boord. De medici besloten dat de loads kon dat niet bevestigen. Hij vertelde de man maandagochtend te hebben gehad dat de ladder was gebroken. "De oorzaak van het ongeval is in onderzoek. De Star Grip heeft na de evacuatie rond tien uur de reis van Antwerpen naar IJmuiden hervat, met een in allerijl uit Vlissingen aangevoerde 'verse' loads.

Foto Adri van de Wege

Also my expression of gratitude to the helicopter crew and the medical team from hospital 'Zorgsaam'. And not to forget to everyone from the Flemish and Dutch pilot services, as well all my colleagues for their well-meant support.

Yours sincerely,

Daniel Dequick



Picture 5: this is how it should be

Near Miss Accident



Broken pilotladder

Dear Colleagues,

Just before disembarking an outbound ship at Rotterdam roads, the pilot ladder parted on both ends, under its own weight!?

My guardian angel looked after me this windy morning .

Kind regards,

Herman Broers
Registerloods - Maritime Pilot
Rotterdam-Rijnmond
Netherlands



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- 7/ Atlantida Azul, Sines, Portugal
- 8/ Rodwell, Portland UK
- 9/ Spitfire, Southampton, UK
- 10/ Izurdia, Bayonne, France
- 11/ Pathfinder, Southampton, UK
- 12/ Cabo Mondego, Figueira, Portugal
- 13/ Espinherio, Averio, Portugal
- 14/ Quinoa, Bordeaux, France
- 15/ Interceptor, Venice, Italy
- 16/ Ursula, Roenne, Denmark
- 17/ Skua, Liverpool, UK
- 18/ Joa vaz corte real, Horta, Azores
- 19/ Foxtrot, Valeta, Malta
- 20/ Alvaro de ornelas, Horta, Azores
- 21/ Faile, Cork, Ireland
- 22/ Getares, Algeciras, Spain
- 23/ Khaleeg Aden, Port of Aden, Yemen
- 24/ Diogo de Teive, Azores
- 25/ Josse Van Hurtete, Azores
- 26/ Turnstone, Liverpool, UK
- 27/ P&O Maritime, Mozambique

- 28/ Bristol, UK
- 29/ Sohar, Oman
- 30/ Setubal, Portugal



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Seminar on Occurrence reporting

Can maritime transport learn from aviation?

Promoting the development of a "Just Culture" principle"

Report : Capt.Roger Allaert

WHY HOLDING THIS SEMINAR?

by **Christine Berg Head of Unit, DG MOVE/D/2 Brussels, 12 February 2015**

Occurrence reporting could play a critical role in enhancing maritime safety, particularly regarding near-misses lessons can be learned from the experience gained in the air transport sector. Key to its success seems be the promotion of a "just culture"

Just Culture "...an atmosphere of trust in which people are encouraged, and even rewarded, for providing essential safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behaviour." Prof James Reason, Professor of Psychology, University of Manchester.

Definition Near-miss : A sequence of events and/or conditions that could have resulted in loss. This loss was prevented only by chance. The potential loss could be human injury, environmental damage, or negative business impact (e.g., repair or replacement costs, scheduling delays, contract violations, loss of reputation). GUIDANCE ON NEAR-MISS REPORTING MSC-MEPC.7/Circ.7 - Oct.2008

Can the "Just Culture" principle be applied in the maritime sector? There is currently no EU wide "occurrence reporting" system for near-misses in maritime transport, but some EU Member States have one. What are the lessons to learn? Are occurrence reporting systems contributing significantly to the reactive and proactive identification of safety risks ? Do they lead to the improvement of safety measures?

How is the EU dealing with this?

- ISM Code - Regulation N° 336/2006
- Accident investigations - Directive 2009/18/EC

Regulation N° 336/2006 on ISM Code, Part A Implementation

Element 9 : Report and Analysis of NonConformities, Accidents, Hazardous Occurrences

Documentation of : Accidents, Hazardous occurrences, Nonconformities including procedures for :

- Reporting - Investigation and analysis of causes
- Elimination of deficiencies
- Measures to prevent recurrences

Maritime accident investigation

- Directive 2009/18/EC establishing the fundamental principles governing the investigation of accidents in the maritime transport sector
- The aim of the technical safety investigation is the prevention of marine casualties and incidents. The conclusions and the safety recommendations should in no circumstances determine liability or apportion blame. During the Seminar, many speakers gave their perspective on how this issue could be tackled in the maritime sector.

IMPROVING SAFETY WITH JUST CULTURE - THE EXPERIENCE OF AVIATION -

by Delphine MICHEAUX NAUDET, European Commission, Aviation Safety Unit

Occurrence Reporting in the Aviation Safety Policy

Is based on the collection of all relevant safety information, including on civil aviation occurrences and is complementary with proactive and evidence-based safety system to prevent accidents before they occur.

Just Culture - A necessity for safety improvement

Aviation safety system is based on feedback and lessons learned from accidents and incidents.

Continued availability of information largely depends on reporting by front line professionals which means : No information = no safety improvement. Safety improvement depends on a relationship of trust between the reporter and the entity in charge of the collection and assessment of the information.

Confidence into systems relies on Just Culture principles implementation.

Just Culture in aviation, what does it mean

Concept of Just Culture defined in EU Aviation Law : *...Just Culture means a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, wilful violations and destructive acts are not tolerated.*

A just culture should encourage individuals to report safety related information by protecting them from prejudice. It should not, however, absolve individuals from their normal responsibilities.

Evolution of the Just Culture concept in aviation

Concept appeared in relation to judiciary.

Most information collected in context of accidents (reactive systems) and involvement of judiciary.

They evolve with development of Safety Management Systems.

Most information collected today is occurrences.

Main focus shifted to corporate context

Introduction of Just Culture in EU Law

Directive 2003/42 on occurrence reporting and Regulation 216/2008 "EASA Regulation"

Protect source identity. No proceedings against reporters in respect of unpremeditated/inadvertent infringements except gross negligence - without prejudice to penal law.

In accordance with national laws and practices, employees who report incidents should not be subject to prejudice by employers

BUT impact was limited as: implementation very divergent between MS (including gross negligence) and national law has precedent over EU rule Regulation 691/2010 ATM Performance Scheme

No substantive JC element but introduces definition of Just Culture

Just Culture : a key element of the Occurrence Regulation

Regulation No 376/2014 on reporting, analysis and follow-up of occurrences in civil aviation

Strengthen legal provisions on JC and support harmonisation

Put in place appropriate legal framework to encourage reporting of occurrences through creation trustful environment

Reports from MORS and VORS treated at same level

Strong protection for reporters and persons mentioned in report

Confidentiality of identity

Occurrences reports used only for the purpose for which it has been collected

States and industry shall not make available or use information on occurrences to attribute blame or liability or for purpose other than maintenance or improvement of aviation safety

States refrain to institute proceedings and limitation of use in proceedings except when 'unacceptable behaviour'

Advance arrangements with judiciary

Protection from prejudice by employer - no blame principle - except 'unacceptable behaviour'

'Unacceptable behaviour' defined

Industry adopt internal Just Culture policy

Possibility to appeal if infringement to above rules

Is legislation sufficient

Not every element of Just Culture can be covered by EU legislation

Legislation does not guarantee appropriate implementation

Legislation necessary but must be supported by appropriate guidance and framework

Roadmap developed for Regulation No 376/2014 to ensure good and harmonised application of the rules

JUST CULTURE : 'An industry perspective'

by Benoit Loicq, Director Maritime Safety and Environment - ECSA

- **JUST CULTURE REPORTING ENVIRONMENT**

Successful implementation of safety regulations
Ship systems are technologically advanced and highly reliable
Proportionate reduced risk of accident? People system
Human error at confluence of a series of failures

- **ROUTE TO NEAR-MISSES REPORTING CULTURE**

We need continuous improvement of safety culture and awareness of crew members. The challenge to define how the human behaviour can be used as a proactive accident prevention tool and most important, lessons learned from existing reporting systems by :

Creation of databases
Voluntary reporting indirectly communicated to Authorities
Fatigue from the contributors
Potential reputation issues

- **CONCLUSIONS** We should promote voluntary near-miss mindset. This should primarily be adopted at a shipping company level. Confidence and confidentiality should apply at each and every level : from the individual on board experiencing a near-misses occurrence to a central body. There is urgent need for a level playing field to avoid more stringent control as a result of this voluntary contribution.

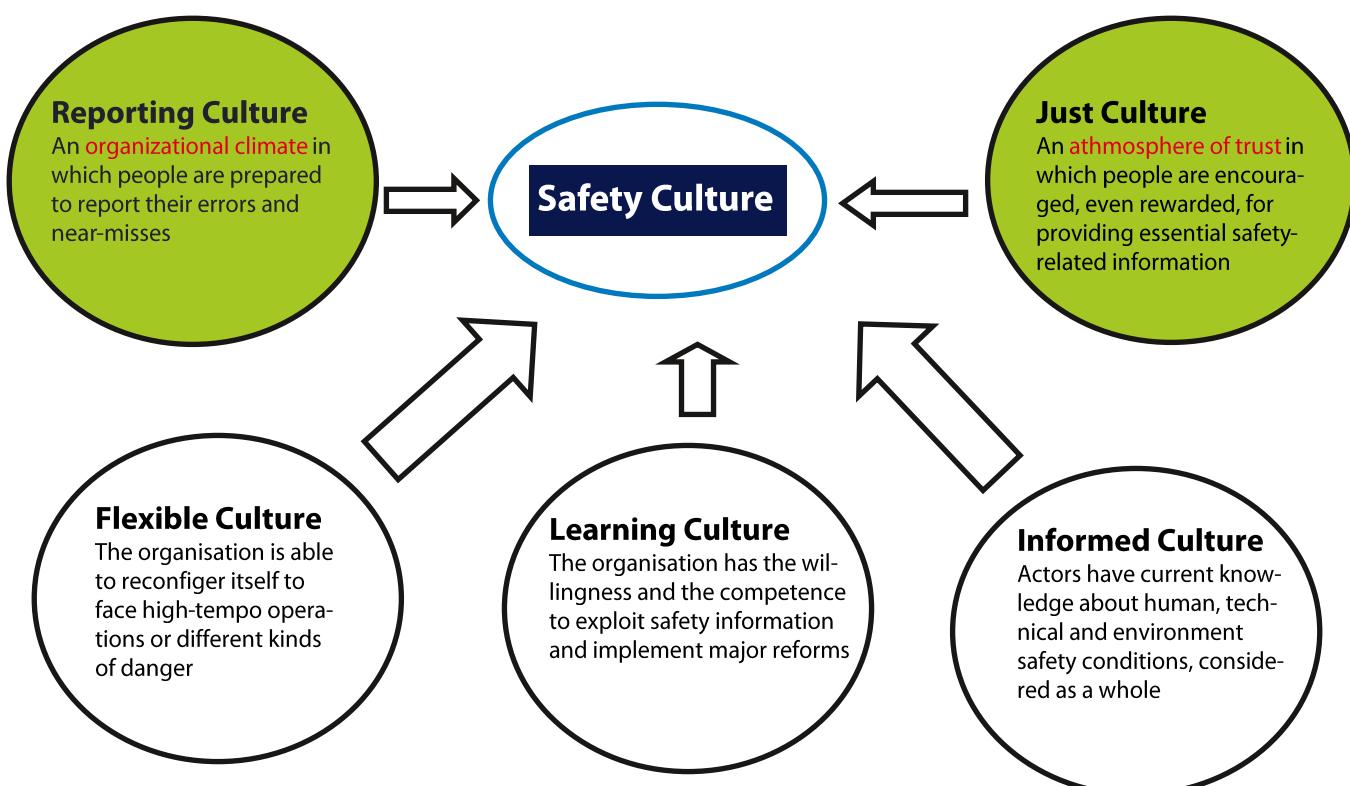
CHALLENGE Define Human Element as a tool for enhancing safety in the maritime sector!

JUST CULTURE and OCCURENCE REPORTING Key to a successful implementation

Ph. AGNES – Airline Captain – Ergonomist - CRM & HF Specialist

N. TOLEDO – Officer of the Deck – Judicial Police Officer - HOF Specialist

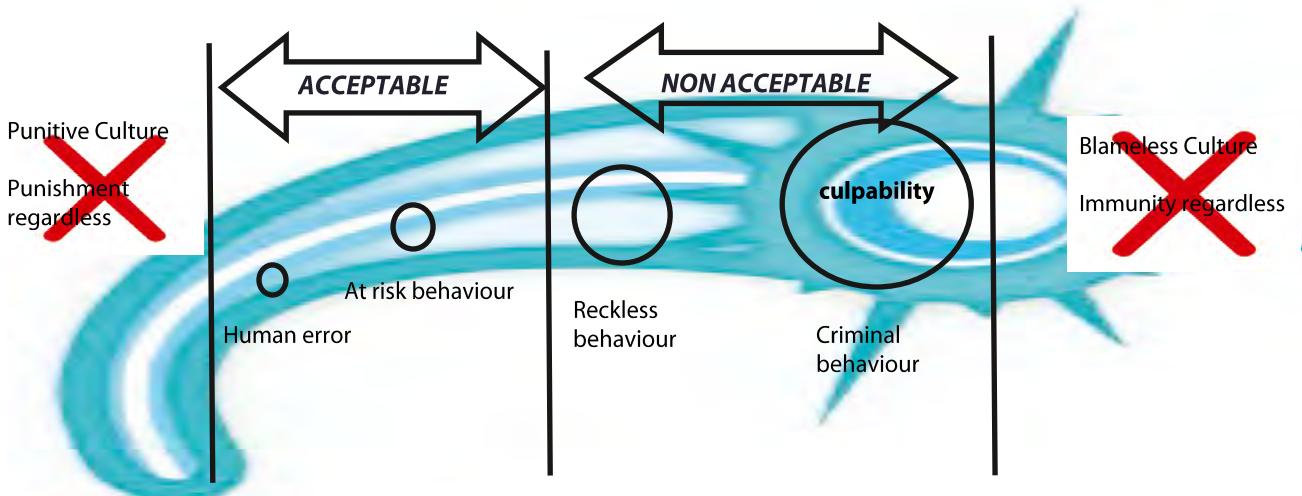
Two of the five components of Safety culture



What is Just Culture ?

An atmosphere of trust [...] where the line must be drawn between acceptable and unacceptable behaviour (J. Reason)

Source : Just Culture Introduction, Best Practices - AAPA Flight Operations & Safety Working Group, 2012



The components of an Efficient Reporting

Communication and dialogue	Explain the purpose, the interest and the working of the reporting
Skills and knowledge	Related to FHO and about all the organisation activities
Trust	Insure a good feed back and the confidential aspect
Leadership	Adopt an exemplary and exemplary conduct, a listening attitude and authority
Willingness & Engagement	<ul style="list-style-type: none"> From both employees and the management An organisation ready to accept major reforms

To implement an efficient reporting

The good questions

- *What is the context respecting the legal aspect, the needs and the feasibility
- *What information are we looking for
- *How could we do it
- *Who is concerned by the reporting
- *Who will use the collected information
- *How to capitalize on the safety-related information?
- *What sort of decisions will follow this work
- *How to inform the employees of the use of the reporting

The difficulties related to the Maritime Industry

- *One organisation but several worlds which work together
- *Difficulties to maintain a view on the crew activity
- *Difficulties to encourage the reporting
- *Problem of motivation, willfulness and interest
- *Cultural aspect considering the weight of the tradition
- *Disciplinary aspect, considering the fact that people are scared of punishment

Keep in mind

To develop a « Just Culture »

The rules must be defined, and written within a charter before any case analysis
The rules must be accepted and shared by all the stakeholders

To implement an efficient reporting system

A good preparation and a well knowledge of the organization are necessary
A training effort and a real commitment are essential
A failure in the first implementation, could result in a loss of trust which may compromise future attempts as well !

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PIOTLADDERS

By Don Cockrill

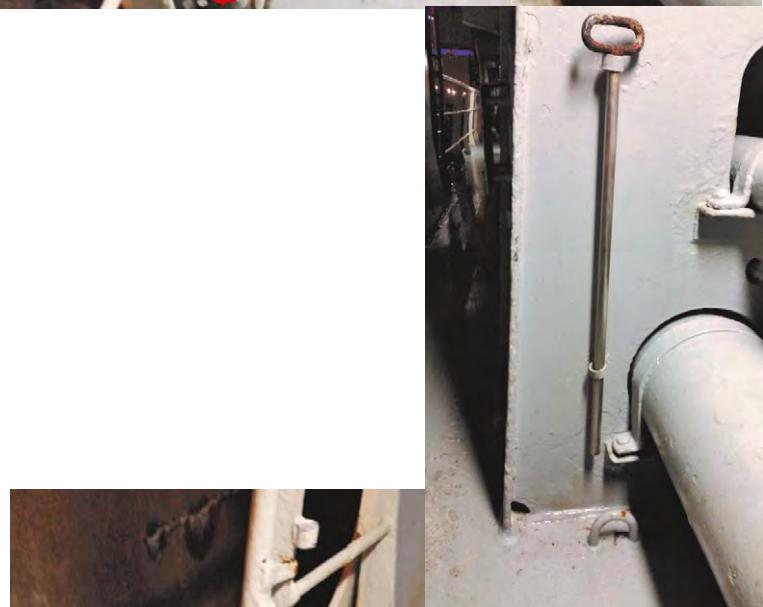
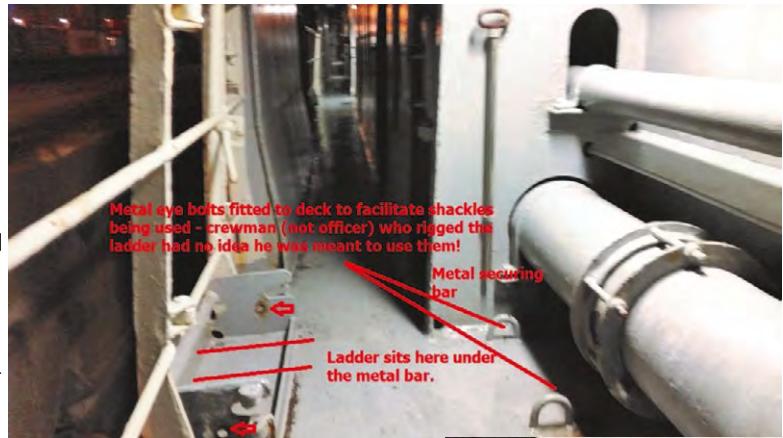
United Kingdom Maritime Pilot's Association

m.v. Gerda has a unique system for securing the pilot ladder where the ladder side ropes are compressed on to the deck by a metal rod, with the belief that the ladder step is then unable to pass/slip past the bar.

This system does not appear to comply with current regulations primarily because the metal rod is simply that – a bit of home made steel with a handle welded on one end. There is nothing to stop the rod vibrating loose and consequently nothing to stop the ladder and pilot falling overboard if the rod fails.

Interestingly there are 2 perfectly placed pad eyes on the deck for securing the ladder using shackles, but the crew man, not an officer, who rigged the ladder looked extremely confused when asked where the shackles were.

The pilot took the Master to the pilot ladder after berthing and explained it all to him – he was in complete agreement and hopefully the shackles were in place for departure.



PILOT

Pilot craft concept

Our range of pilot crafts
designed by and for pilots



En service

En service

En service



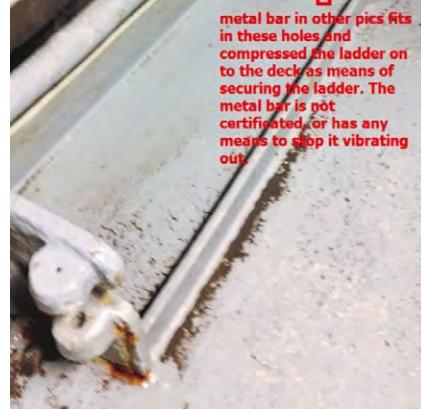
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Proper use of hull magnets



UNITED STATES COAST GUARD

U.S. Department of Homeland Security

MARINE SAFETY ALERT

Inspections and Compliance Directorate

November 10, 2014
Washington, DC

Safety Alert 14-14

DESIGNED FOR A REASON – HULL MAGNETS

MODIFICATIONS MADE TO PILOT LADDER MAGNETIC SECURING DEVICES LEAD TO ACCIDENTS

This alert raises awareness as to the importance of not modifying equipment or components from their intended design or operation. Recently, a State Pilot suffered a concussion as he was boarding a vessel via its pilot ladder. The primary cause of the accident was an improperly modified embarkation ladder hull magnet that disconnected from the ship's hull and struck the Pilot on the head.

Unfortunately, this was not an isolated incident. Additional incidents with injuries have occurred on other vessels at several different ports. In each of those instances the hull magnets were modified prior to the accident. Moreover, in all cases, after restoring the hull magnets to their original design no further problems were experienced.

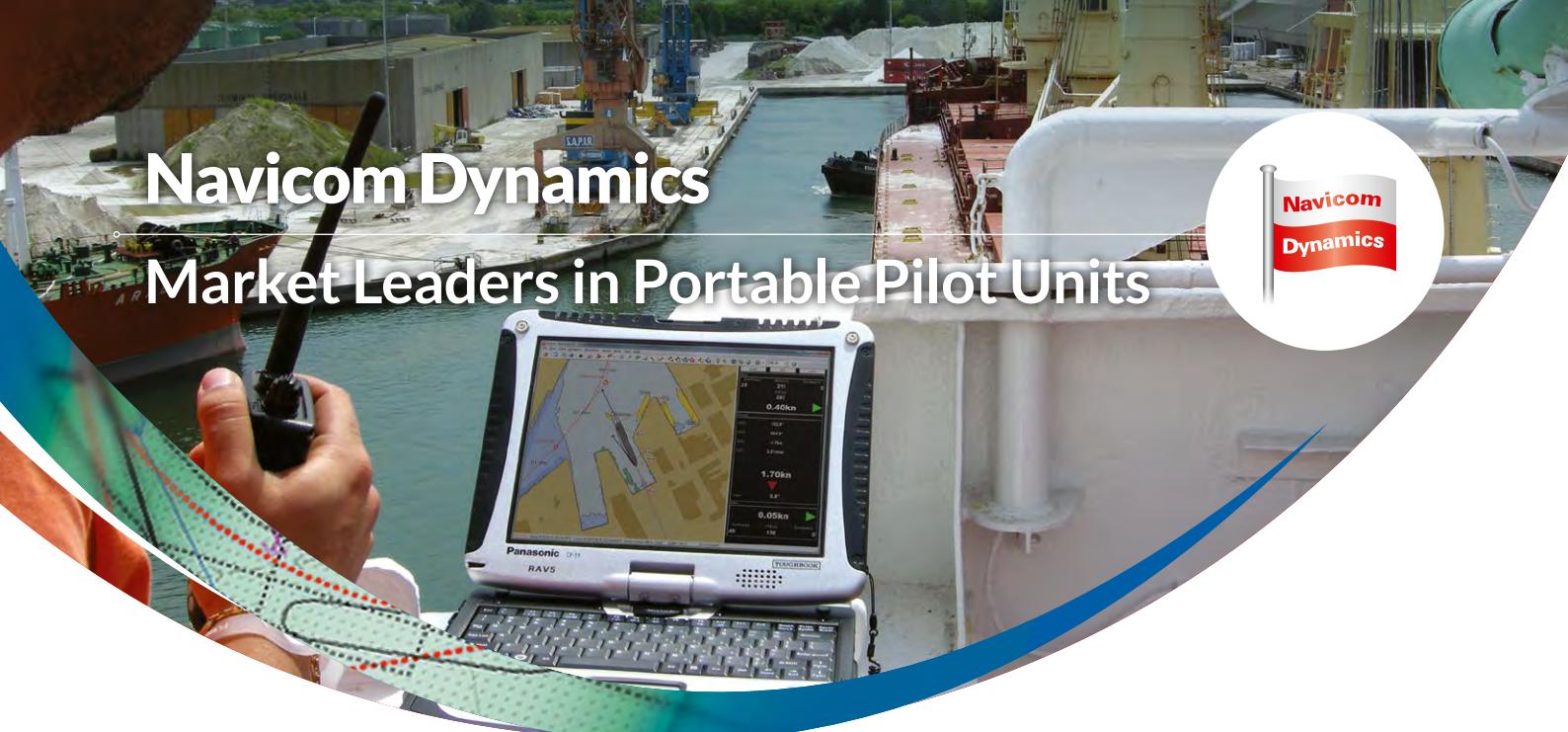


Hull magnets are easy to operate devices and when positioned correctly, provide substantial holding force. The handle of the magnet is also a lever and enables easy release from the hull of the vessel. The intended proper use of the magnets is shown in the above image. In the incidents where the magnets unexpectedly detached from the hull, only one securing magnet was used between the rails of the ladder along with equipment alterations that deviated from the manufacturer's design (see image below).

The Coast Guard strongly recommends that vessel owners/operators refrain from modifying embarkation equipment. In addition, operators should regularly inspect existing vessel boarding equipment and return improper modifications back to the manufacturer's original design. Pilots are encouraged to consult with their appropriate associations to determine if any additional precautions should be taken as part of their normal boarding practices and this identified risk.



This Safety Alert is provided for informational purposes only and does not relieve any domestic or international safety, operational or material requirements. It was developed by the Washington State Pilots Association, Coast Guard Sector Puget Sound and the Office of Investigations and Casualty Analysis, Washington DC. For questions or concerns, please email hqs-pf-fldr-cg-inv@uscg.mil.



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ShuttlePilot For relative positioning operations and buoy moorings in the offshore industry, especially shuttle tanker movements to FPSO. Options include: ESD, hawser and riser monitoring.



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Technical and Training

Product Information

Portsmouth

Portsmouth International Port is Britain's best connected ferry port. It is also one of the largest fruit-handling terminals in the UK, as well as an established and expanding cruise terminal; situated within the Solent, one of the world's busiest shipping areas.

The port consists of the Continental Ferry Port, Camber Quay and Flathouse & Albert Johnson Quays. Vessels with a length of 48 metres or more and vessels carrying more than 12 passengers are subject to compulsory pilotage.

Due to increased traffic volume and larger vessels, Portsmouth Pilots started using tablet based portable pilot systems (PPUs) in 2014. The PPUs serve as an additional aid to navigation in port areas. The detail of the official ENCs used was not deemed sufficient for maximum draft pilotages and during complex berthing evolutions.



Please visit our YouTube page to experience the ORCA Pilot G2 features

Portsmouth Port Authority conducts maintenance dredging and surveys on a regular basis, the data was recently used to create a bathymetric chart inlay, a so called bENC. **The bENC is then displayed as an additional layer to the official ENC on the ORCA Master G2 PPU.**

"We contacted SevenCs in Germany, and asked if it would be possible to use local high density depth information, to create a bathymetry chart layer and display it in our PPUs". After a short evaluation of the data, SevenCs confirmed that the CAD files contained all the necessary information (including geodetic parameters and chart datum reference) to produce a bathymetric ENC.

The production of the bENC dataset took less than a day and included the following steps: Conversion of CAD drawing file from Autocad-dwg format to S-57 (i.e. the format of the electronic chart) followed by some post-conversion steps with special chart production software. Finally, the bENC dataset had to undergo a strict validation process to ensure that quality standards are appropriately met.

"We received the data via automatic download to our PPUs. During the evaluation phase we were impressed with the benefits of the data and how smoothly it integrated into the chart display, alongside official ENCs.

With this additional information we can now operate larger and deeper draughted ships with more confidence, and without compromising our high safety standards, it also enables us to keep an eye on other ships positions, particularly our tugs, when operating close to shoals"

UK eLORAN NOW IN OPERATION TO BACKUP VULNERABLE GPS

- **Seven land-based monitoring stations to help ships navigate with signals one million times more powerful than GPS;**
- **eLoran technology will protect world's busiest sea lanes from powerful illegal GPS jammers, space weather interference and other causes of GPS loss;**
- **Technology could backup critical national infrastructure, such as the Grid and City of London in the case of major GPS outage.**

Technology to counter the threat of GPS jamming is now available at Dover and along the East coast of the UK, as the nation continues to set a benchmark across the globe.

The General Lighthouse Authorities (GLAs) of the UK and Ireland announced at the end of October the Initial Operational Capability of UK maritime eLoran.

Seven differential reference stations are now in operation to provide additional position, navigation and timing (PNT) information to ships fitted with eLoran receivers, ensuring they can navigate safely in the event of GPS failure in one of the busiest shipping regions in the world, which 200,000 vessels are expected to cross every year by 2020.

Today, many devices and applications rely on GPS-based information, including telecommunications, smart grids, and high frequency trading, and it plays a fundamental role in delivering the PNT data that ships, which carry 95% of UK trade, rely on for safe navigation. The European Commission estimates that an €800 billion (£690bn) segment of the European economy is currently dependent on global satellite navigation systems.

GPS signals are vulnerable to interference and both deliberate and accidental jamming, which is causing increasing concern because of the wide availability of GPS jammers online for as little as £30 capable of causing complete outages across all models of receiver currently on the market. Loss of this data, even for a short time, can put vessels, cargo, lives and the environment at risk.

As a system entirely independent of GPS, eLoran can provide navigation information for vessels as well as the timing data necessary to maintain the power grid, cell phones, financial networks, and the Internet in the event of an outage. Unlike satellites, eLoran signals can also reach inside buildings, under-ground and under water.

The UK is the first in the world to deploy this technology for shipping companies operating both passenger and cargo services. The rollout was approved by the Department for Transport in 2013. Led by the General Lighthouse Authorities (GLAs) of the UK and Ireland, deployment of the system involved replacing the existing radio receiver equipment in two prototype reference stations at Dover and Harwich, and the creation of five new reference stations in the Thames, Humber, Middlesbrough, Firth of Forth, and Aberdeen.

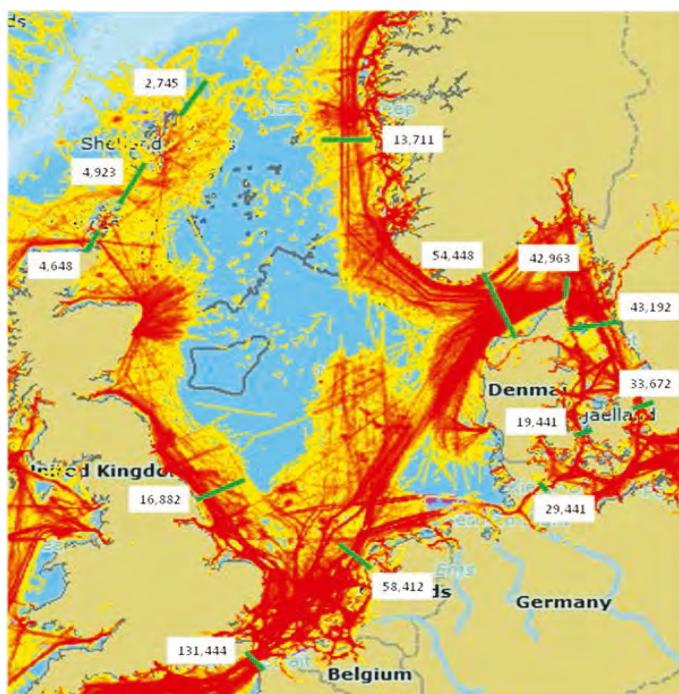


Diagram illustrating shipping traffic in NW European waters. The busiest areas are coloured red. The digits indicate the number of movements recorded in 2012.

Captain Ian McNaught, Deputy Master of Trinity House, commented, *"Demands on marine navigation continue to increase with growing congestion and awareness of the vulnerability of GPS is growing. eLoran provides a signal around one million times more powerful than those from satellite signals, providing resilience from interference and attack."*

The achievement of Initial Operational Capability for the system at Dover and along the East coast of the UK is a significant milestone, providing for improved safety aboard appropriately equipped vessels. The maritime industry would now benefit from the installation of eLoran receivers on more vessels to take advantage of improved navigational safety.

The telecoms, finance, energy and other industries which are subject to significant issues caused by the loss of timing signal provided by GPS, are recommended to take advantage of the enhanced reliability now available to address the over-dependence of key national infrastructure on vulnerable satellite systems."

Grant Laversuch, Head of Safety Management at P&O Ferries, which installed the technology as a test system aboard the ferry *Spirit Of Britain* at Dover said, *"Pinpoint-accurate positioning and navigation is especially vital for us because we operate in the busiest shipping lane in the world and Spirit of Britain is one of the largest ships ever built for the Dover-Calais route. Our ships had occasionally experienced loss of satellite signal so we trialled eLoran as a crucial 'back-up' to ensure we can navigate accurately at all times and provide an extra guarantee of passenger safety."*

We welcome the news that Britain is leading the way in guaranteeing safe shipping lanes by deploying this technology across the coastline."

Dr Geoff Darch, principal consultant at international design, engineering and project management consultancy, Atkins, added, "Global navigation satellite systems, like GPS and Galileo, provide vital positioning and timing information to help the operation and management of infrastructure across a range of sectors. These systems are very effective for this purpose but are susceptible to interference including by space weather. eLoran is a great example of a technology that could provide an important back-up to satellite navigation systems should these become damaged or degraded by severe space weather."

eLoran technology is based on longwave radio signals and is independent and complementary to GPS.

Several nations around the world are consulting with the GLAs to benefit from its knowledge and experience of eLoran. The Republic of Korea, for example, has expressed that it wants to establish an eLoran alliance with the UK while it pursues its own rollout of differential eLoran reference stations, and new eLoran transmitters based on the latest technology. In 2012 ROK was the victim of a 16-day GPS jamming attack by North Korea

Full operational capability covering all major UK ports is expected by 2019.

About the General Lighthouse Authorities

The General Lighthouse Authorities (GLAs) of the United Kingdom and Ireland are Trinity House, the Northern Lighthouse Board and the Commissioners of Irish Lights. Together, they have the statutory responsibility for the provision of marine aids to navigation around the British Isles.

The GLAs' joint mission is the delivery of a reliable, efficient and cost effective aids to navigation service for the benefit and safety of all mariners.



More information about the General Lighthouse Authorities of UK and Ireland's Research and Radio navigation Department can be found at <http://www.gla-rrnav.org/>

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51st International Football To

2015's International Soccer Tournament took place in Amsterdam, Netherlands, between 14 and 16th of May. Preparations begun almost 2 years before, outline plans for the tournament have been unfolded in Kiel at the party during which the prizes of last year's soccer tournament were presented . The organising committee has done their utmost to facilitate a tournament in IJmuiden, where the main office of the local pilot association is located.

It proved difficult to keep the budgets within limits, but in March 2014 Amsterdam was designated as the soccer capital of Europe 2015.



Thursday 14th of May all soccer-players and families checked in at the special check-in-desk in the hotel lobby of NH Barbizon, at a stone's throw from the Central Railway Station.

The drawing party took place in NH Krasnopol'skiy, approximately 300 meters away. The evening started at 7 pm Meanwhile the DJ was entertaining all participants (guests?) with some nice light music enabling the 'hi, how are you' and 'long time no see ' to be exchanged.

During the Captains' meeting it was decided that the 11 teams would form an EMPA -team with excess players. The 12 teams would play in 2 groups. (11 teams? 12 teams?) The drawing took place in a South American atmosphere after a nice tribute (contribution?/ warm up?) from a Brazilian Drum-band.

With the 2 groups sorted out, Joanne Telesford drew/lured? everybody to the dance floor with an outstanding performance, after which the DJ took us in no time to closing hours at midnight.

Friday morning meant an early rise for the competitors.

The first buses left the hotel at 08.15 am for the play-grounds of SV RAP, the pitches were in perfect shape and all teams were welcomed with the Champions League theme to emphasise the importance of the day event.

Before kick off all teams appeared in front of the camera for a team photo.

A group of 60 ladies and children joined in the Ladies Tour. They left the hotel at 10 am and started the day with a historical walking tour through the city centre of Amsterdam. The guides did an outstanding job and around noon it was time to enjoy lunch on board of one of the canal boats and view Amsterdam from the Canals.

The clouds were slowly disappearing, the sun brought some extra joy and by the time the ladies reached the play-grounds the weather was close to perfect.



Proud winners : Team Flushing

urnament Amsterdam 2015

The physiotherapists and first-aid girls have not been extremely happy but unfortunately 2 players required a further check up in hospital. Fortunately one of them returned before the distribution of the prizes and the accompanying party, but it took over 24 hours before everybody had returned to their teams.

It was a tough day for everybody with a total of at least 5 games. After the group- phase the UK and Rotterdam were facing each other in the small final. Eventually the UK proved to be slightly more effective than Rotterdam and took third place after a 1-0 win.

The final between Vlissingen and Norway required overtime to decide this year's winner of the EMPA tournament. Just before the final whistle and penalties, Vlissingen scored 1-0. Norway lacked time (and probably also breath) to counter this score. Vlissingen became number one for the first time in 15 years, which made them frantic for joy. The final was played in perfect circumstances, happy hour had begun, beer was flowing, snacks consumed. Music entertained the party.

Time to return to the hotel and prepare for the evening.....

At 7.30pm doors opened at St Olofs Kapel, which was accessible through an underground passage from the lobby.

With an appetiser and welcoming music from the band a gogo, everybody was exchanging their experiences of the day.

Tonight it was children first with the special kids menu on the first floor. Fortunately walking dinner followed shortly afterwards, all participants had to supply their energy levels.

After main course, the harbour master of Amsterdam (Jeanine van Oosten) showed her gratitude for the opportunity to present the prizes to such an international group of players and their families.

After the prize ceremony and a moment of ecstasy for Vlissingen on the platform, a gogo changed the setting and took all present into the small hours of Saturday morning on an addictive rhythm.

Saturday morning was time for farewells and goodbyes at the breakfast table.



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3rd Winner UK

4th Winner ROTTERDAM

5th Winner NOK BALTIC

6th Winner KIEL

7th Winner WESER—EMS

8th Winner ITALY

9th Winner AMSTERDAM

10th Winner FRANCE

11th Winner BELGIUM

Stern Light EMPA TEAM

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Seminar information

ChartWorld and UKHO start a series of joint seminars

A seminar on challenges of ECDIS Implementation, Procedures & Solutions was successfully held in November in the Yacht Club Greece, Athens. The hosts of this remarkable event, ChartWorld International Ltd. and UKHO, were very pleased to welcome the top experts of many well-known Greek and international marine companies.

During the seminar the UKHO representative, Mrs. Francesca Davis, introduced the latest Admiralty publications. "Going digital with Admiralty" will help to meet SOLAS carriage requirements for the use of ECDIS, as the ships' safety management systems must include procedures for the operational use of ECDIS. She announced that all Admiralty publications will be available in digital format in Q1 2015 e.g. from their partner ChartWorld.

ChartWorld International sales director, Mr. Stephan Dimke, reported on typical aspects of changing to ECDIS and paperless navigation, including practical recommendations to the shipping companies. He presented, eQuip, the ChartWorld ECDIS management system, which can help to make going paperless quick, easy and successful. eQuip was created based on the UKHO requirements for ECDIS processes written down in NP 232.

Finally there was the highlight of the evening – the first ever presentation of the new ChartWorld ECDIS eGlobe G2 to a wider audience. With eGlobe G2 ECDIS ChartWorld is the first company to worldwide present a smart ECDIS concept based on touchscreen GUI.

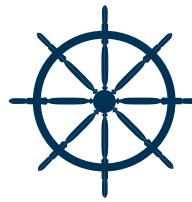
This event was the first one of a planned series of seminars organized by ChartWorld and the United Kingdom Hydrographic Office, due to take place in 2015 in different locations all over the world - Germany, Dubai, Turkey, Singapore, China, Hong Kong and India.

ChartWorld International is a service provider supplying the shipping industry with navigation systems, charts and publications for SOLAS vessels, inland waterway crafts, yachts and workboats since 2002. ChartWorld is an authorized value added reseller for UKHO, Primar and IC-ENC.

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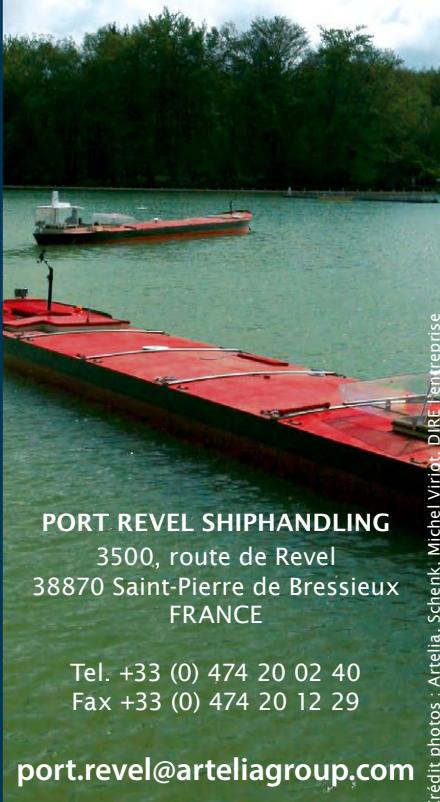


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