

**CRIMINALISATION SURVEY**  
shipmaster arrests – is it putting  
seafarers off the job?

**TECHNOLOGY**  
ITF / WMU study assesses  
automation's threat to jobs

**HEALTH & SAFETY**  
Fatigue risk  
in Panama Canal

**MINIMUM WAGE**  
ILO set out the International  
minimum wage for seafarers

the global

Volume 3 | Number 13 | February 2019

# seafarer

## COURTING TROUBLE?

Survey reveals continued fears  
over criminalisation

**NAUTILUS**  
Federation

A Federation of Maritime Professionals

the global

# seafarer

Volume 3 | Number 13 | February 2019



5



11



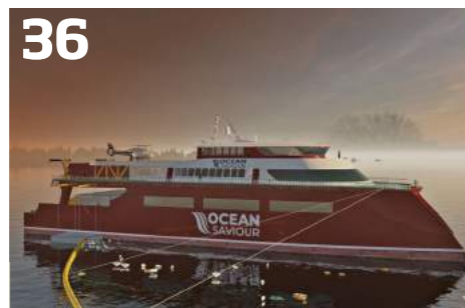
18



23



26



36



40



44

## HEALTH & SAFETY

- 05 New rules on emergency signs after Costa Concordia disaster
- 44 EU funded project to improve at-sea health care using digital technology

## SUPERYACHTS

- 18 Deborah McPherson reports on the Monaco Yacht Show 2018, which offered plenty of advice and support to yacht crew

## INTERNATIONAL

- 26 What does a Brexit no-deal really mean for UK certificated officers? Justin Stares gives a view from Brussels

## ENVIRONMENT

- 36 Michael Howorth reports on a special vessel designed to clear up the plastic out of our oceans

## TECHNOLOGY

- 40 Research commissioned by the International Chamber of Shipping predicts shore-based centres for the future of autonomous ships

# Welcome

Having attended the ITF Congress, **Mark Dickinson** explains how the work of Nautilus with fellow labour organisations around the world benefits members...

**I**n October 2018 I was part of the Nautilus delegation at the 44th Congress of the International Transport Workers' Federation. There were lots of interesting debates and we set the policy and work programme to guide the work of the ITF for the next five years around the theme of Building Union Power.

The ITF and its work internationally on behalf of its affiliates is important and assists Nautilus in its mission to protect our members, but it can sometimes feel a long way from the everyday lives of those working at sea. I was not back from the ITF Congress for long before the reality of life at sea for too many seafarers was brought home to me once again. Our Nautilus/ITF inspector in NW England sent me details of a case he had been working on where seafarers were contracted on basic salaries as low as \$235 per month. Even with overtime payments, some of those onboard were still only earning \$500 per month. That's under half the consolidated salary recommended in the ILO Maritime Labour Convention.

Despite not even paying their seafarers a decent wage – and forcing them to work very long hours that compromised the safety of everyone onboard – this unscrupulous company then had a list of deductions coming straight out of the crews' pay. Many had spent money on expensive satellite telephone cards, simply trying to keep in touch with their families while they were away.



All seafarers are protected by the minimum standards of the MLC. It is timely that I am part of the ITF delegation attending the Joint Maritime Commission subcommittee on wages of seafarers, looking to agree a real-terms increase in this pay floor. However, for far too many workers these minimums become maximums. And while it is important that we achieve a decent increase under the ILO mechanism, which many other agreements are built on, we will never have a true level playing field and fair pay at sea until all seafarers are able to continuously improve the terms and conditions of their employment through strong trade unionism.

**Until the ILO minimum wage is enforced by flag states, some shipping companies will continue to pay very low rates, making it harder for decent employers to compete**

Until the ILO minimum wage is enforced by flag states, with penalties for non-compliance, some shipping companies will continue to pay their seafarers these shockingly low rates, and this in turn will make it harder for the decent employers out there to compete and engage with trade unions to provide decent work for seafarers – wherever in the world they come from.

For more information on the ILO discussions, please visit the dedicated website [fairpayatsea.org](http://fairpayatsea.org). In the meantime, I and all other Nautilus personnel – including our ITF inspectors and our lay representatives working to improve terms and conditions within their own companies – will continue to work alongside the wider ITF family to ensure fair treatment and fair pay for all maritime professionals. [f](#)

Published by  
Nautilus International  
on behalf of

**NAUTILUS**  
Federation  
A Federation of Maritime Professionals



## In brief

**Reporting cut:** European transport ministers have backed plans to cut the number of reporting requirements for ships visiting EU ports. The 'maritime single window' scheme aims to reduce the administrative burden by introducing a 'once-only principle' in which ships would only need to report once per port call, and the same information would be re-used for subsequent port calls within the EU.

**Coastal call:** the UK government has been urged to improve the support it gives to encourage freight to be moved on water instead of roads. A British Ports Association seminar last month heard that the proportion of domestic freight being moved by coastal shipping has fallen from 27% in 1975 to 8% in 2017.

**Carbon plan:** Maersk has announced plans to become a 'carbon-neutral' shipping company by 2050. The company says it has cut its relative CO2 emissions by 46% since 2007, but warns that work on new green technologies must accelerate if 'decarbonised' ships are to become a reality by 2030.

**Wind base:** a £10m project to build a new operations and maintenance base for the Galloper offshore windfarm has begun in the UK port of Harwich. The Hutchinson Ports scheme will include a purpose-built pontoon for crew transfer vessels.

**Fishy power:** The Norwegian shipping company Hurtigruten has announced plans to power at least six of its 17 ships with liquefied biogas – produced from dead fish and other organic waste – as well as using LNG and large battery packs.



Pictured above is the 20,954TEU CMA CGM Louis Bleriot making a maiden UK call to the UK port of Southampton on 3 December 2018. Image: Gary Davies/Maritime Photographic

## 'Cadets' on FoC ship treated like slaves

Nautilus/ITF inspector Tommy Molloy has helped to get owed wages and repatriation for seafarers who were being treated like slaves onboard a foreign ship visiting the UK port of Bromborough.

Mr Molloy is pictured right with two Indian crew members he supported after UK Border Force officials raised concerns about conditions onboard the Tuvalu-flagged general cargoship Amira Laura.

He discovered that the pair – who were listed as being cadets – were being paid just US\$250 a month, although their contracts specified \$400 a month. Even worse, Mr Molloy added, they had paid \$5,500 for the jobs.

The employees were in fact working as an OS and a wiper, and were regularly doing 16-hour days. "They were also undernourished, as they were being fed nothing in the morning, some kind of bread in the afternoon and no cooked meal in the evening," Mr Molloy said.

Further checks found that an Egyptian crew member was being paid US\$500 per month, despite his contract saying he should get \$1,750, and Mr Molloy lodged a claim for \$27,500 in unpaid wages with the owners.

"The crew members were petrified and had been physically abused onboard," Mr Molloy said. "I was also threatened and had to call in the police and port security to intervene so that we were able to get the three guys off the ship OK."

Since then the two Indian seafarers have flown home, with ITF officials meeting them in Chennai to ensure their safety. The Egyptian seafarer is in the UK while his



application for asylum is considered.

Mr Molloy said the Maritime & Coastguard Agency had told him the ship could not be detained to secure payment in line with the ILO minimum wage. "This was a shocking case of exploitation, but I can't see why it was allowed to happen," he added.

"How can authorities say they can't enforce the ILO minimum wage when it's referred to in the Maritime Labour Convention? They are not the only flag state authorities to do so. I have been told directly by one flag state that it is not enforceable. In which case what is the point of it?"

"In effect they are saying a shipowner is welcome to pay as little as they can get away with."

Nautilus general secretary Mark Dickinson said the case highlights the importance of the Fair Pay at Sea campaign.

# SIGNS OF CONFUSION

Lessons learned from the Costa Concordia disaster have helped to shape new rules governing emergency signs on merchant ships. ANDREW LININGTON reports...

**J**anuary 2019 will see changes to the International Maritime

Organisation's SOLAS Convention that clarify and harmonise the requirements for escape route signs and equipment location markings – bringing them into line with International Organisation for Standardisation (ISO) criteria.

Signs – especially on ships – are all around us, and their shape, colour and symbols are determined through a science known as semiotics. This seeks to ensure that signs are immediately recognisable and unambiguously understood by the person on the receiving end.

Semiotics influence every aspect of safety signage – from why warning signs are yellow, safety signs green, prohibition signs red and mandatory signs blue to what shape a fire escape marker should be.

However, a paper submitted to the IMO by the United States and the ISO called for revision of the rules for signage indicating the location and arrangement of escape routes to the assembly stations, as well as markings for the locations of fire protection equipment and life-saving appliances.

"The loss of the Costa Concordia illustrated the compelling need to ensure consistent and effective signs and markings to facilitate the rapid evacuation of passengers in an emergency," it warned.



▲ The new IMO signage requirements have been developed in response to the Costa Concordia disaster. Image: Thinkstock

"Despite the crew being responsible for assisting the passengers to their assigned assembly/embarcation stations, language difficulties between the various nationalities onboard resulted in a chaotic, disorganised abandonment," the paper added. "The recently boarded passengers, having spent only a limited time on the ship, lacked a thorough familiarity with its layout and the established escape routes, resulting in a prolonged evacuation."

In response to the paper, the adequacy of shipboard safety signs and markings was reviewed by an IMO working group on passengership safety established after the Costa Concordia accident.

This concluded that the current SOLAS standards 'have become scattered and inconsistent', with ambiguous regulations leading to shipyards and shipowners frequently following different approaches to escape route signs and equipment markings.

"It is not unusual to find escape

routes and equipment inappropriately marked with signs based on graphical symbols intended for use on fire control plans, which may not be easily understood when used as signs,' the working group noted.

"The current inconsistencies in the regulations could result in confusion over the proper direction of escape travel in an emergency, hindering the safe escape of passengers," it warned.

The review found that the existing SOLAS rules fail to set clear standards for marking or signs to embarkation stations, and give no guidance on the means of illumination or type and arrangement of escape route and equipment marking signs.

The new rules will come into force on 1 January 2019, and will apply to all ships built after that date. They will also require existing vessels to update signage when they undergo repairs or modifications.



# MAIB warns officers not to silence alarms

Seafarers have been warned against disabling Electronic Chart Display and Information Systems (ECDIS) alarms to prevent 'annoyance and distraction' while on watch.

The warning comes in the latest UK Marine Accident Investigation Branch (MAIB) Safety Digest, which reports on a case in which a small bulk carrier became grounded on a sandbank for six days.

The MAIB said an inspection of the vessel's ECDIS found the system's safety frame or 'look ahead' was inactive and that its audible alarm had been disabled.

The vessel had been following a planned track on the ECDIS when the second officer had taken

over the bridge from the master at midnight.

The master told the OOW to revise the route, which he did on the ECDIS. The route was checked visually but the results of the automatic check route function were not inspected.

The MAIB says there have been a number of groundings in recent years resulting from revised passage plans not being checked thoroughly. It stressed the need for visual checks to be made on larger scale ENC's and for the automatic check to be utilised. The report admits that some ECDIS alarms 'can appear unhelpful and distracting' but says they are 'potential lifesavers' in open waters where monitoring of the ship's position is reliant on the bridge watchkeeper alone. **i**

## ECDIS mistake led to grounding

A 72,561dwt bulk carrier ran aground on a reef after a test route was mistakenly uploaded onto the ECDIS.

The Maltese-flagged Marbella suffered damage to bottom shell plating and internal structures in a ballast tank after grounding during a ballast passage from Hong Kong to Indonesia in September 2017.

A Maltese flag state investigation found that the ship's watchkeeper – who was alone on the bridge and navigating mainly by sight and radar – had failed to see the reef when he changed course to avoid some fishing vessels.

The original voyage plan had been changed a

day after leaving Hong Kong to comply with the charterer's suggested route. However, the report says, 'it appears likely that on the changeover of the route at sea, the test route was inadvertently clicked and uploaded'.

Electronic navigation charts were not checked for visual verification and the risks of sailing in close proximity to the reef were not recognised, it adds. Investigators said it was possible that the scale was not optimised and the reef was not viewable on the ECDIS, and that while ECDIS was the primary means of navigation, 'its innumerable functions were not used to their full potential'. **i**

## 'Name and shame' call on reports

Bulk carrier owners have suggested that the International Maritime Organisation (IMO) should 'name and shame' flag states which fail to publish accident investigation reports.

Delegates attending the annual meeting of the owners' organisation Intercargo expressed concern at 'undue delays' in the production of casualty investigation reports – highlighting the continued lack of information about the loss of the Marshall Islands-flagged bulker Stellar Daisy and its crew of 22 in March 2017.

Intercargo said it wanted to see 'strict compliance' with the IMO's casualty investigation code, and it questioned whether this should be backed up with a 'naming and shaming enforcement process'.

Outgoing chairmn John Platsidakis said Intercargo supports the work of the IMO, but is concerned about the practicality of recent regulations such as ballast water management and emission reduction measures.

'Policing the quality of the new compliant fuels seems to be a great challenge already, as it has proved extremely difficult to address the very serious recent problems with existing fuels,' he added. **i**

## Ferry collides with boxship

Clean-up and salvage operations were launched last month after a Tunisian ferry struck an anchored containership some 15 miles off the coast of Corsica.

The 17,907gt ro-pax Ulysse was reported to have been sailing at 19 knots when it ran into the 54,592gt CSL Virginia during a voyage between Italy and Tunisia. No one was injured, but the collision resulted in a significant fuel leak and 4km-long slick.

Local authorities said that a judicial inquiry into the accident will be undertaken. **i**

## Insurers seek action to cut boxship fires

Marine insurers are set to table proposals at the International Maritime Organisation for new measures to cut the risks posed by containership fires.

The International Union of Marine Insurance (IUMI) said it is concerned at the potential for huge losses arising from incidents involving ultra-large containerships, and it is seeking to tighten SOLAS Convention fire protection requirements.

'On large containerships where around 20% of boxes are empty, we are likely to see a combined cargo and hull value of around US\$1.5bn, and that doesn't include any wreck removal or pollution costs,' said IUMI president Dieter Berg.

IUMI is seeking improved fire detection, monitoring and extinguishing systems, as well as divisions such as bulkheads and hatch covers, above and below decks, to prevent fires from spreading.

Meanwhile, Maersk Line has taken steps to improve the carriage of dangerous goods following a review conducted in response to the fire onboard Maersk Honam in March, in which five crew members died.

'All cargo aboard the Maersk Honam was accepted as per the requirements of the International Maritime Dangerous Goods Code and stowed onboard the vessel accordingly,' said head of fleet technology Ole Graa Jakobsen.

'Despite this, as the fire originated in a cargo hold in front of the accommodation which held several containers with dangerous goods, it had an unbearably tragic outcome,' he continued. 'This clearly showed us that the international regulations and practices with regards to dangerous goods stowage needs to be reviewed in order to optimally protect crew, cargo, environment and vessels.' **i**



Emergency services deal with the decomposing cargo onboard Purple Beach Image: Haveriekommando

## IMO urged to tackle fertiliser hazards

The International Maritime Organisation is facing a fresh call from accident investigators to tighten the rules governing the carriage of fertiliser cargoes.

Barely two months after an Isle of Man probe into the loss of the Bibby bulk carrier Cheshire revealed shortfalls in the existing regulations, a German report has recommended action to close loopholes in the International Maritime Solid Bulk Cargoes Code (IMSBC).

The call comes in a report on an incident in May 2015 when the Marshall Islands-flagged vessel Purple Beach had to be evacuated in the German Bight when the decomposition of ammonium nitrate fertiliser caused dense smoke, heat and fumes.

The German investigation board, BSU, said 'ambiguous' rules resulted in the cargo being misleadingly classed as not harmful.

It urged the IMO to reclassify

ammonium nitrate-based fertilisers as a Group B, rather than Group C, cargo to more clearly reflect the risk of a chemical reaction.

BSU also called for the IMO to delete the solid bulk cargo 'non-hazardous' definition suffix 'because it fails to account for the hazards actually posed during loading and carriage'.

The investigation failed to determine the cause of the cargo decomposition, but the report criticises the decision to carry out welding work in the vicinity of the cargo hold to attach additional D-rings to secure the load.

BSU said the ship's crew had mistakenly assumed the cargo was on fire, and the use of CO<sub>2</sub> to deal with the incident 'was not appropriate'.

However, investigators said the emergency procedures within the cargo information given to the crew had only addressed the outbreak of fire and made no mention of possible decomposition. **i**



The Tunisian ferry Ulysse struck the anchored boxship CSL Virginia Image: Marine Nationale



# P&I action on ECDIS failings

A leading P&I club has warned that there is growing evidence of problems with the set-up and use of electronic chart display and information systems (ECDIS) onboard ships.

The London Club says its inspections have revealed an 'increasing number of negative findings that are attributable to how the introduction of ECDIS on ships has been managed'.

Common problems identified include a lack of ECDIS content in the watch handover checklist, a lack of familiarity with the manual

position-fixing method, a lack of GPS position cross-checking, a lack of understanding of the safe application of deep-contour, safety-depth, shallow contour and safety contour, and a failure to revise the safety management system (SMS) to include ECDIS.

'The primary function of ECDIS is to enhance the safety of navigation, but experience is showing that installation and approval alone are not enough to achieve this goal,' the Club warns.

In a bid to tackle the problems, the club

has joined forces with London Offshore Consultants to produce a guide to the proper management of ECDIS onboard ships.

It stresses the need for companies to ensure that watchkeepers have comprehensive training – including type-specific familiarisation – and that they have 'a strong management-of-change policy at the heart of SMS'. **i**

## Mission tackles the language gap

The Mission to Seafarers (MtS) is running a series of English courses for seafarers in Myanmar in a bid to improve safety at sea. The charity says it is on target to have provided lessons to 400 seafarers by the end of 2018.

'The Mission to Seafarers has invested in this service as we understand that the importance of communication at sea is ensuring the highest of safety standards and in helping seafarers secure employment,' said Ben Bailey, director of advocacy and regional engagement. 'Mis-communication can lead to disaster, especially during an emergency, which is why we have placed such importance in rolling out this project,' he added. **i**



## Double collision after UK ship dragged anchor in Humber

A UK-flagged general cargoship collided with two other vessels after dragging its anchor in heavy weather in the Humber estuary earlier this year.

The 2,840gt Charles M Willie vessel Celtic Spirit struck its sistership, Celtic Warrior, and the 1,420gt survey ship Atlantic Explorer after drifting in force 8 to 9 winds at the Hawke anchorage. All three ships sustained shell plate damage, but there were no injuries and no pollution.

A UK Marine Accident Investigation Branch (MAIB) report concludes that Celtic Spirit failed to deploy sufficient anchor cable for the tidal range and environmental conditions, and it had taken nine minutes for the watchkeeper – who was fixing the position at 30-minute intervals – to spot that

the ship was dragging.

Investigators said the ship was unable to manoeuvre in sufficient time to avoid the collision because its engine was not on standby, and class conditions relating to engine readiness while operating with only one anchor were not followed or understood.

The report says a lack of company guidance meant that there was an inconsistent approach to engine readiness onboard sister vessels in the same fleet.

Charles M Willie has updated its safety management system in response to the accident and Associated British Ports has undertaken an anchorage review. **i**

## MAIB warns on enclosed space risks

A renewed warning about the deadly risks of enclosed spaces has been issued following an incident in which a crew member died onboard a UK-registered fishing vessel.

The second engineer of the pelagic trawler Sunbeam was found unconscious in one of the vessel's refrigerated salt water tanks while preparing for refit work in the port of Fraserburgh in August.

Three crew members who went to his aid became dizzy, confused and short of breath soon after entering the tank and two of them had to be recovered by colleagues wearing breathing apparatus.

A safety bulletin issued by the UK Marine Accident Investigation Branch (MAIB) notes that no safety procedures for entering or working in the tanks had been completed by the second engineer. Tests after the accident showed the level of oxygen at the bottom of the tank to be less than 6%, compared to the normal level of 20.9%, and the presence of refrigerant gas was also discovered.

The MAIB said the crew had failed to appreciate the levels of risk they were taking, and stresses the need for all work activities to be subject to risk assessment. 'Working in enclosed spaces is particularly hazardous, and procedures for entering and working in them should be robust and understood,' it adds. **i**

## Death leads to call for D&A review

P&O Ferries has been urged to review the enforcement of its drug and alcohol policy following an investigation into the death of a crew member on a vehicle deck on the 22,152gt ro-ro European Endeavour.

A report by the Irish Marine Casualty Investigation Board (MCIB) also recommends that the company review its working systems for unaccompanied trailer cargo operations.

The seafarer died after being crushed by a trailer that he was guiding into position onboard the Bahamas-flagged ferry in the port of Dublin last June.

Investigators said the AB was found to have a 'significant' blood-alcohol level, above STCW limits, which 'may have contributed to loss of concentration or impaired judgement'.

The report notes that the cargo loading system means the driver of the tractor unit is unable to see the crew member guiding unaccompanied trailers into position and has to rely on whistles to raise alerts. 'During this incident the driver did not have sight of the guide and the whistle system was not effective, either because no whistle was heard or the guide was not in a position to blow the whistle,' it adds. **i**

## Lessons from fatal pilot boat capsizing

Accident investigators have called for improved standards to govern pilot boats following an incident in which two people died when a launch capsized and sank after encountering 'unexpected' high waves up to 4m as it manoeuvred to collect a pilot from the tanker Sten Nordic in the Gulf of Finland last year.

The Finnish Safety Investigation Authority found that the L-242 boat could lose up to 70% of its stability in such conditions and it warned of an absence of clear official standards covering the various ways in which commercial craft are used. **i**



A CCTV image showing the CMA CGM Centaurus hitting the quay in the port of Jebel Ali

## Time pressures led to boxship port crash

Nautilus has raised concerns after an investigation into an accident involving a UK-flagged containership highlighted serious shortcomings in safety culture.

The 131,332gt CMA CGM Centaurus suffered structural damage after making heavy contact with the quay and two shore cranes in the port of Jebel Ali in May 2017. One of the cranes collapsed, resulting in 10 port workers being injured.

A UK Marine Accident Investigation Branch (MAIB) report on the incident points to the 'particularly exasperating' cultural divide between masters and pilots, and also warns of the negative safety impact of time targets and bonus payments set by port 'key performance indicators' (KPIs).

Investigators said the 11,388TEU vessel was going too fast when the pilot began a turn into a basin at the port. 'The pilot's performance was focused on efficiency, which influenced his decision to turn the ship into the basin without ensuring that the manoeuvre was conducted at a sufficiently slow speed to enable its safe completion,' the report states.

The MAIB said the bridge team failed to effectively challenge the pilot because they 'lacked the necessary knowledge and experience to be able to confidently intervene'.

The report says many of the factors

contributing to the accident were the consequence of 'a focus on completing acts of pilotage as quickly as possible'. Port control had ordered the ship to enter the approach channel before the pilots had embarked, leaving limited opportunity for an effective master-pilot exchange, and the pilot's first action on boarding was to order full ahead.

The MAIB said that while no one it interviewed said time pressures had influenced their decisions, 'their actions tell a different story' and it recommends that DP World UAE Region removes KPIs 'that potentially create inappropriate performance bias towards efficiency against safety'.

It also calls for international shipowner, maritime pilot and harbour master associations to conduct a joint campaign to promote the benefits of effective bridge resource management procedures during pilotage.

Nautilus professional and technical officer David Appleton commented: 'It is quite disconcerting to hear that the bridge team did not have sufficient knowledge of the manoeuvring characteristics of their own ship to be confident in challenging the pilot's actions. It is vital that crews are sufficiently trained and experienced so as to enable them to intervene when necessary – even in the face of unacceptable commercial pressures.' **i**





Large ships navigate the Panama canal Image: hstiver/Getty Images

## Study shows fatigue risk in Panama Canal

Fatigued tug captains are posing a major safety risk in the Panama Canal, according to independent research carried out for the International Transport Workers' Federation (ITF).

Produced following a long-standing dispute between the Panama Canal Authority (ACP) and the ITF and the captains' union UCOC, the report highlights serious health and safety concerns arising from current work patterns.

Many of the captains are doing continuous shifts in excess of 12 hours – and some are doing more than 20 hours in a row following a decision by the ACP to cut crewing levels last year.

Researchers found that tug captains are now being relied on to accompany the larger neo-panamax ships for the entire length of the waterway, and have to be on-task for the entirety of their shift. 'Captains complained that they are unable to use the toilet, eat or address other personal needs, when necessary, during vessel assists,' the report notes.

ITF general secretary Stephen Cotton said: 'This

independent study confirms what the UCOC, and the ITF, have consistently said to the Panama Canal Authority: that the significant reduction in manning, compounded by the excessive overtime being required of tugboat captains, are jeopardising the safety of workers, including Panamanian citizens, and risk exposing them to a potential environmental disaster.

'Tugboats play a key role in the transit of large vessels with hazardous cargo through the narrow and complex waterways of the Panama Canal, and the potential for a catastrophic incident mounts with the increase in a tugboat captain's fatigue,' he added.

'Fatigue, anxiety and health-associated risks are exposing the tugboat captains to unnecessary hazards, while also endangering other seafarers transiting the canal. There is also increased risk to vessels passing through the locks and the canal's own facilities. This situation needs the full attention of the shipping community, before disaster strikes.' **t**

## Death sparks new outcry over lashing

A fatal accident in the port of Dublin has raised renewed concerns over the use of seafarers to do container lashing and securing work.

Filipino seafarer Dennis Gomez Regana died after being struck by a container during cargo operations onboard the Antigua & Barbuda-flagged vessel Francop at Southbank Quay.

International Transport Workers' Federation (ITF) maritime coordinator Jacqueline Smith said: 'When a ship gets to port the seafarers onboard have done their work; they should be maintaining their ship and resting.

'The very last thing they should be doing is the difficult and dangerous work of lashing and securing containers. The work should be left to dockers who have the training and experience to do it more safely.'

ITF dockers' section representative Peter Lahay added: 'We must put an end to unscrupulous shipowners and port operators putting pressure on seafarers to do lashing and securing.

'I hope they take notice of this tragedy and change their ways. If they don't, then more seafarers will be seriously hurt or killed.' **t**

## Research calls for a re-think

An in-depth analysis of almost 700 accident investigation reports has concluded that a new approach to reducing risk at sea is required.

The Seafarers' International Research Centre report says the study shows that better training and recruitment practices would have a significant impact on preventing some of the most common accidents.

The report says the analysis shows areas in which shore-based managers 'need to place greater priority on safety and less emphasis on commercial considerations'. **t**

## Report points to shortfalls in generic SMS

Dutch accident investigators have warned of the dangers of using generic safety management systems after an accident in which a welder died onboard a dredger in the North Sea in 2017.

A Dutch Safety Board report on the incident – which involved the 5,116gt trailing suction hopper dredger Scelveringhe – notes that two welders were repairing the loading pipe on the ship when the bridge team decided to pump water into the hold to help stabilise the ship in deteriorating weather conditions.

Investigators noted that no permit had been issued for the work, and the bridge crew were unaware that the men were in the pipe. Welding in the pipe had been identified as a risk onboard, but ways of mitigating the risk had never been systematically analysed or included within the safety management system (SMS).

The report notes that the dredger's operator had been using a generic SMS to manage risks on the vessel, and it says the incident shows that SMSs will guarantee or increase safety only if they tie in with onboard practices on specific vessels.

In response to the accident, the vessel operator has revised its SMS and introduced an 'enclosed space' for work in the loading pipe. **t**

## Salvage switch

Keeping tugs on standby to respond to maritime emergencies is no longer sustainable, International Salvage Union (ISU) president Charo Coll said last month.

But while ISU members have accepted 'the reality of different ways of working', Ms Coll warned that ship owners and insurers need to 'provide sufficient remuneration to encourage investment in vessels, equipment, training and the development of highly qualified staff'. **t**

Almost 100 cars, vans and freight units were damaged when the ro-ro Epsilon rolled to an angle of 33 degrees in heavy weather Image: MCIB



## Masters disagreed on voyage safety

A ferry company has been urged to clarify its chains of command after an incident in which master and senior master disagreed over the safety of a planned voyage in heavy weather.

The Irish Marine Casualty Investigation Board (MCIB) found that the 26,375gt ro-ro Epsilon had rolled to an angle of 33 degrees in force 10 conditions and wave heights of up to 9m while sailing from Cherbourg to Dublin in February 2016.

Ten passengers and two crew members were injured, and 59 cars, vans and caravans and 40 freight units were damaged in the incident.

The MCIB found that the senior master on the Italian-flagged vessel, which was on charter to Irish Ferries, had expected to be able to run ahead of the deteriorating weather and be in the shelter of the Irish coast before the sea state exceeded the agreed 8.0m limit for the ship.

The senior master had overruled the night-time duty master, who believed the conditions were not suitable and argued for the sailing to be delayed until the storm passed through.

The MCIB said the incident had raised an issue about the way in

which two masters on a ship make decisions in such circumstances. The report recommends that the company clarifies both roles 'in order to ensure the effective safety management of the ship and the change of command in mixed mode operation'.

The investigation found that the handover arrangements for command of the ship – which were suitable for the Dublin-Holyhead service operated by the ship during the week – were not in accordance with the procedures required for the longer voyages to continental Europe at the weekend.

The MCIB also noted that the lashing system used onboard Epsilon had not been approved by the flag state or a classification society acting on its behalf. And investigators found that the weather forecast was not being automatically updated on the bridge computer because of an issue with the logging-on process.

The report concludes that the ferry's roll had probably been caused by 'a high and unique wave train added to by the refraction and reflection of waves around the headland and from the shore that synchronised with the vessel's roll period'. **t**

## Alarm at ballast system failures

Up to 80% of ballast water treatment systems are failing to operate properly, the tanker owners' organisation Intertanko has warned.

'Failures are unfortunately becoming a daily problem,' Intertanko environmental director Tim Wilkins told a conference in

Singapore last month. He said feedback from members indicated that 60% to 80% of ballast water treatment systems are not functioning correctly.

Mr Wilkins said the IMO needs to be given information so regulators can understand the scope of the problems. **t**



## In brief

**Judgment call:** a French appeal court has dropped fines of €30,000 and €1m imposed on the master and owner of a Liberian-flagged bulk carrier who were found guilty of 'voluntary pollution' off the coast of Brittany in February 2016. The court held that Liberia had the rights to judge the case under the terms of the Montego Bay Convention.

**Indian corridor:** India has announced the creation of a maritime corridor 15 miles off its west coast in a bid to cut the increasing number of serious collisions between merchant ships and fishing vessels, which are particularly prevalent off Kerala. The 20-mile corridor may ultimately become a traffic separation scheme.

**Mexico move:** French-owned Mexican operator Baja Ferries has taken delivery of the former French ferry Stena Carrier, which was on charter in the North Sea with P&O Ferries this summer. The 21,174gt vessel has been re-christened Mexico Star and will operate on a service between Mexico and California.

**Master jailed:** a Russian shipmaster has been jailed for four months by a Swedish court after prosecutors alleged that he had been drunk when the 7,138gt general cargoship BBC Lagos ran onto a sandbank off Helsingborg while sailing from Lithuania to Las Palmas in August earlier this year.

**Corsica boost:** Corsica Ferries is set to open new services between France and Sicily next April ahead of the expected renewal of public service contracts for 'lifeline' operations between Marseilles and five Corsican ports in October 2019.

### CANADA

## Owners warn on plight of crew held for over a year

A Canadian maritime union has claimed a major victory after the country's government agreed to clamp down on the employment of foreign seafarers in Canada's coastal waters.

Following a long campaign by the Seafarers' International Union of Canada (SIU), the government has changed the rules governing the use of temporary foreign workers to ensure that Canadian seafarers retain the first right to be employed in any available jobs in the coastal trades.

Under the new rules, Canadian seafarers will have to be offered jobs before companies can gain a work permit to employ a foreign crew member for more than 30 days. The SIU says the move will help to protect foreign seafarers from exploitation by ensuring that they have Canadian pay and conditions while working in

the country's waters.

The union had filed more than 50 lawsuits against the Canadian government complaining that it was violating the temporary foreign worker programme by systematically issuing work permits to non-Canadian crew members on hundreds of foreign ships engaged in cabotage services. It uncovered evidence that some foreign seafarers were being paid as little as C\$2.41 (€1.59) an hour while serving in Canadian coastal trades.

'This is a significant and hard-fought victory for Canadian seafarers and the collective Canadian maritime industry,' said SIU president James Given. 'The next step will be ensuring that there are enforcement and regulatory procedures in place to ensure these policy changes are being strictly enforced.'



### RUSSIA

## ITF helps stranded seafarers

Netherlands-based International Transport Workers' Federation inspector Gijs Mol has gone to the aid of the crew of a Russian ship who have been stranded in the port of Terneuzen since May.

He helped with local community efforts to provide the 21 seafarers onboard the 23,169dwt bulk carrier Kuzma Minin, above, with food and other essential supplies after they ran out of fresh fruit and vegetables and started to run low on water last month.

The Russian-flagged vessel was arrested in

May for unpaid bills. It is one of at least eight ships owned by the Murmansk Shipping Company which have been seized in recent months in ports in Europe, the US, Asia and Africa as a result of financial problems affecting the firm.

The Seafarers Union of Russia has voiced concern about the conditions being experienced by the ships' crews, and the Russian Investigative Committee has opened legal proceedings over the non-payment of wages for more than three months. The company has denied reports it will file for bankruptcy.



Pictured above is the 399,999dwt Pacific Vision – described as the world's first 'intelligent' very large ore carrier (VLOC). Built in China, the Hong Kong-flagged vessel is the first VLOC to get the SmartShip notation from the classification society DNV GL. This was awarded

on the basis of the wide range of technological features fitted onboard, including a smart navigation decision support system, a ship energy efficiency management and optimisation system, and smart-vessel operation and maintenance system.

### NORWAY

## Union sinks ferry firm's plans for flagging out

The Norwegian Seafarers' Union (NSU) has won a long-running battle to prevent ferry company Color Line from switching ships from the NOR domestic ship register to the international one (NIS) – a move that would have potentially cost 700 Norwegian jobs as cheaper foreign crews were introduced.

In a decision hailed by the International Transport Workers' Federation as 'a significant victory', the Norwegian government confirmed it will not push ahead with the plans to open up the Norway-Germany ferry routes to the international register.

NSU president Johnny Hansen commented: 'This is a major win for our country's seafarers, and the country itself. Enforcing and maintaining cabotage safeguards our strategic interests, provides jobs and brings added economic value, while

also protecting national security and the environment.'

Stian Grøthe, the union's director of politics and governmental affairs, said the key lesson from the campaign is never to give up. 'It was a lot of hard work and a matter of keeping going. Our expectations changed from month to month.

'Sometimes the news made us feel optimistic and sometimes the news made us feel not so optimistic. But we've been working very hard and systematically,' he added. 'As time was going on, we saw that people from all around Norway were engaging with the case. Not just because of Color Line but because it was bigger than that. We had interest from colleagues in other Nordic countries and politicians in other Nordic countries.'

## 'SLAVERY' ROW OVER FILIPINO CREW

The Norwegian Maritime Authority stopped a Bergen-registered cargoship from sailing following union complaints of 'slave-like conditions' for crew members.

The authority detained the 756gt Ottar after finding more than 30 deficiencies onboard and ruling that the vessel was overloaded and some paperwork and contracts were not in order.

Norwegian Seafarers' Union inspector Rune Larsen said the Filipino crew were underpaid, including the first officer who was allegedly on a monthly wage of US\$4,600. The seafarers have had their passports confiscated and face possible deportation, according to local media reports.

A lawyer representing the ship's owners, Norse Marin AS, rejected the allegations.

## In brief

**Scrubber ban:** Singapore has announced a ban on the use of open-loop scrubbers in its waters, effective from 1 January 2020. The Maritime & Port Authority of Singapore said the discharge of wash water from open-loop exhaust gas scrubbers in its port waters will be prohibited, and visiting vessels fitted with open-loop scrubbers will be required to use 'compliant' fuel.

**Drone checks:** Norwegian authorities are buying three new 'sniffer' drones to carry out checks on ship emissions following successful trials during the summer. The inspection programme resulted in five shipping companies being fined between €25,770 and €61,845 after they were found in breach of sulphur content rules.

**MSC fined:** Swiss containership owner MSC has been fined US\$630,625 for breaching air quality rules in the ports of Los Angeles and Long Beach by failing to reduce auxiliary engine power generation by at least 50% and for exceeding limits for auxiliary engine run time while at berth.

**Panama mission:** the Mission to Seafarers is set to open up new seafarer welfare services at all major ports in Panama under a new agreement with the country's maritime authorities. The agreement will also cover the provision of welfare services for seafarers in the Panama Canal.

**Ship withdrawn:** the charities Médecins sans Frontières and SOS Méditerranée have announced that they are ending the operation of the migrant rescue vessel Aquarius, blaming European governments for 'actively sabotaging' its mission.



## In brief

**US safety:** the US Senate has unanimously approved new maritime safety legislation developed in response to the loss of the containership El Faro in 2015. The new rules address issues including ship inspections, safety equipment, weather forecasts, float-free voyage data recorders, and a confidential safety reporting programme.

**Battery progress:** Stena Line has reported positive results in the first phase of its project to operate the 29,691gt ferry Stena Jutlandica as a battery hybrid vessel on a service between Sweden and Denmark. In the first month of operation, the use of battery power amounted to savings equivalent to some 500 tonnes of fuel and 1,500 tonnes of CO<sub>2</sub>, it said.

**Chinese cruises:** the Chinese operator Cosco is moving into cruiseship operations after buying the P&O Cruises ship Oriana. Cosco will take delivery of the vessel next year and has established a joint venture with China Travel Service to run the ship, with V.Ships being appointed to carry out technical management and hotel operations.

**Fjord rules:** Norway is proposing to introduce new rules to reduce emissions and discharges from cruiseships in its world heritage fjords. It is consulting on a plan to prohibit ships from using scrubbers or burning fuel containing above 0.10% sulphur in the West Norwegian fjords.

**Grimaldi orders:** the Italian operator Grimaldi has announced a \$1.5bn plan to build six ro-ro vessels for Europe-West Africa lines and four ro-paxes for its passenger services in the Mediterranean and the Baltic.

FRANCE

## Shipmaster faces prison sentence for grounding

A Turkish shipmaster is facing a six month prison sentence in France after prosecutors claimed his 'gross negligence' was to blame for the grounding of his vessel off the Brittany coast.

Brest Criminal Court heard that Captain Rifat Tahmaz had committed a 'series of errors and mistakes' before the Maltese-flagged general cargoship TK Bremen ran aground and spilled 112 tonnes of oil in December 2011.

Prosecutor Jean-Philippe Recapé said: 'There was a succession of bad decisions that should have been avoided by an experienced captain like Captain Tahmaz. His choice to leave the port of Lorient was a mistake, a real imprudence, and a fault. He endangered his ship, his crew and of course the environment through pollution.'

Calling for the master to be given a six-month

suspended jail sentence and a fine of €20,000, prosecutors said he had failed to heed warnings of adverse conditions when he decided to take the ship to sea in ballast condition.

He had also failed to make a timely report to the shore authorities that the vessel was in difficulty.

Defence lawyer Stanislas Lequette said Capt Tahmaz had been asked to leave port to make way for another ship and had sought shelter after being advised by a pilot of the deteriorating conditions. Urging the court not to make the master a 'scapegoat', he said Capt Tahmaz had warned the port that the ship was drifting, but had been 'abandoned' by the authorities.

The judgment has been reserved, and the court is set to deliver the verdict on 13 December. **i**



## Biggest fast ferry will run on LNG

The Spanish ferry operator Baleària has ordered what is claimed to be the largest ever high-speed catamaran – pictured above – a 125m dual-fuel vessel which will carry up to 1,200 passengers and 500 cars.

The €90m catamaran is being built at the Armon Gijón shipyard in Spain and is due to come

into service on routes to Spain's Balearic islands in summer 2020.

Powered by four dual-fuel Wartsila 16V31DF main engines of 8,800kW each, the vessel will have a service speed of 35 knots, and a top speed of more than 40 knots. LNG storage tanks give the ferry a range of 400nm. **i**

FRANCE

## BRITANNY FERRIES BLAMES BREXIT FOR BOOKINGS SLUMP

French operator Brittany Ferries has warned that concerns about Brexit are behind a 'worrying downward trend' of advance bookings.

'The uncertainty, instability, and decline in the confidence of travellers crossing the Channel are an

obstacle to our growth and to the development of the regions we serve,' said chief executive Christophe Mathieu.

The company said this summer's freight volumes declined by 5% from the previous year. **i**

## PIRACY AND ARMED ROBBERY AGAINST SHIPS

ICC INTERNATIONAL MARITIME BUREAU



PIRACY

## Fresh warnings over Gulf of Guinea risks

As 12 seafarers were freed last month after being kidnapped from a Swiss-flagged merchant ship off Nigeria in September, the International Maritime Bureau's (IMB) Piracy Reporting Centre issued a new warning about the risks of attack in the Gulf of Guinea.

Lengthy negotiations between Geneva-based Massoel Shipping and the kidnapers led to the release of the Filipino, Bosnian, Croatian, Romanian, Slovenian and Ukrainian crew from the bulk carrier Glarus, which was seized by pirates on 22 September.

Nautilus national secretary Holger Schatz welcomed the release of the crew. 'We had been in close contact with Massoel Shipping and the Swiss authorities and urged them to do everything they could to resolve the issue,' he said. 'The company did its best for the kidnapped seafarers and also supported the seven crew members who were not kidnapped. But it is clear to us that the authorities in Nigeria and internationally need to intensify their efforts to ensure the safety of seafarers on ships in the region.'

The attack on the Glarus was one of 156 incidents of piracy and armed robbery

recorded by the IMB in the first nine months of 2018. The total compares with 121 for the same period last year and includes 107 vessels boarded, 32 attempted attacks, 13 vessels fired upon and four vessels hijacked.

The number of crew members held hostage increased from 80 in the first nine months of 2017 to 112 by the third quarter of 2018.

The IMB said the Gulf of Guinea accounted for 57 of the 156 reported incidents. While most of these incidents have been reported in and around Nigeria (41), the Nigerian Navy has actively responded and dispatched patrol boats when incidents have been reported promptly, it added.

There has also been a noticeable increase in the number of vessels boarded at the Takoradi anchorage, in Ghana.

The IMB said 37 of the 39 crew kidnappings for ransom globally have occurred in the Gulf of Guinea region, in seven separate incidents. A total of 29 crew members were kidnapped in four separate incidents off Nigeria and the IMB advises that all waters off Nigeria are deemed 'risky' and crews should remain vigilant in the area. **i**

UNITED STATES

## OPERATOR FINED \$3.2M FOR 'MAGIC PIPE'

A German shipping company has been fined US\$3.2m after being found guilty of obstructing justice and maintaining false records to conceal deliberate pollution from one of its ships.

The US Department of Justice said the Liberian-flagged bulk carrier Marguerita, operated by Mineralien Schiffahrt Spedition und Transport GmbH (MST), had discharged oily bilge waste through a 'magic pipe' bypass.

Prosecutors said the intentional discharges from the 27,674dwt vessel had occurred over a nine-month period. The company had been convicted in 2016 of falsifying an oil record book to cover up deliberate oily waste discharges from another of its ships – including discharges into the Great Lakes.

MST was additionally sentenced to four years of probation. **i**

## In brief

**Indian boom:** India is now the world's third largest seafarer supply country, the country's shipping minister has announced. The Indian government says policy measures have increased the number of seafarers from 108,446 in 2013 to 154,349 today, and the country now provides 9.35% of the world's seafarers. In a bid to expand numbers further, the government has lifted a ban on opening new pre-sea and post-sea institutes.

**GPS alert:** US maritime authorities have warned ships about the risk of 'multiple instances of significant GPS interference' in the eastern Mediterranean Sea. Reports of interference, resulting in lost or altered GPS signals, have come from ships in Port Said, the Suez Canal, the Saudi Arabian port of Jeddah, and near Cyprus.

**MLC move:** the United Arab Emirates says it is seeking to ratify the Maritime Labour Convention soon in response to a series of seafarer abandonment cases in its water. UAE authorities say that they have had to deal with 60 abandonment cases involving 300 seafarers in the last few years.

**Ferry switch:** after 30 years of cross-Channel service, the French freight ferry Nord Pas-de-Calais has been sold to Cyprus-based Vanessa Shipping and switched to the Cyprus flag. The 13,727gt vessel has been renamed Al Andalus Express and is now operating between Spain and Morocco.

**Asbestos fine:** Dutch firm Damen Ship Repair has been fined by a French court and ordered to the pay legal expenses of 12 former workers who fear they may have been exposed to asbestos while working on an Algerian LNG carrier.



## In brief

**Med curbs:** authorities in the Spanish city of Barcelona have backed plans to create a new emissions control area in the Mediterranean, which would limit the sulphur content of ship exhaust to 0.1%. The proposals, which have been developed by the CleanCruiseNetwork alliance, would require ships to take power from the local electricity grid while they are berthed.

**Northern boom:** cargoes carried by ships on Russia's Northern Sea Route are set to have topped more than 17m tons during 2018. Authorities report that freight volumes have almost doubled over the past year, and controversial plans to relax ice-class requirements have been drawn up in a bid to further increase shipping movements.

**Speedy skipper:** a New Zealand ferry skipper has been fined NZ\$1,688 (€1,021) after being found guilty of speeding in the port of Wellington. A court heard that the passenger ferry City Cat grounded at 17 knots in a 5 knot area and the vessel lacked a detailed chart of Wellington harbour.

**Shortsea call:** Greek shipowners have called for the European Union to boost the use of shortsea shipping by adopting measures to improve the efficiency and competitiveness of the European fleet, including financial support and reduced bureaucracy.

**Sail plan:** the French car manufacturer Renault has revealed plans to build two wind-powered vehicle carriers to operate a pilot service between France, the US eastern seaboard and Newfoundland.

### JAPAN

## Long-standing seafaring nations 'must do more'

Countries with long maritime traditions need to do more to ensure that they have sufficient seafarers for the future, Nautilus general secretary Mark Dickinson told the recent annual congress of the All Japan Seamen's Union (AJSU).

In an address to delegates at the Japanese union's conference, Mr Dickinson said countries like the UK and Japan faced similar challenges in maintaining a sustainable supply of younger seafarers.

'We must pay particular attention to our respective governments to ensure they take the necessary policy measures to protect the future of our national seafarer skills,' he added. 'This is no easy task as the world gets smaller, globalisation continues, and many shipowners try to avoid strong trade unions.'

'We must therefore work together to face these challenges and continue to fight for national jobs, decent work, and a future for our young people in the shipping industry,' Mr Dickinson said.



The AJSU is campaigning to increase the number of new Japanese seafarers following several decades of decline which have seen total numbers fall to just 2,300. Yasumi Morita, the union's president, says the government should consider employment subsidies to help bridge the cost gap with crews from cheaper countries and to ensure that a strategic target of 5,000 Japanese seafarers is reached. **i**

### TAHITI

## MASTER SENTENCED FOR GROUNDING ON REEF

The master of a Philippines-flagged general cargoship has been given a one-year suspended prison sentence after being found guilty of not reporting an engine failure and a grounding in French Polynesia.

The 13,110gt Thorco Lineage ran aground on the Raroia Atoll in June 2018 while sailing from the US to Australia with a cargo of zinc. The vessel was towed to safety six days later and prosecutors said it was fortunate that the incident had not resulted in an environmental disaster.

The criminal court of Papeete heard that the ship had experienced a series of problems in the nine days leading up to the accident — which the chief engineer had blamed on poor quality fuel — and it criticised the ship's captain for failing to warn the local maritime authorities of engine failure and not reporting the grounding.

The master's lawyer told the court he had informed the owners of the problems, and considered the situation was under control.

The owners, Sinbanali Shipping Incorporated, were fined the equivalent of US\$227,000. **i**

### DENMARK

## Register win for unions

The Danish parliament has unanimously approved a bill that enshrines the rights of unions to negotiate on behalf of members serving on ships on the country's international register, DIS.

The new rules — which have been backed by maritime unions and shipowner organisations — will mean that Danish wages and working conditions will prevail on ships operating in the scheme, including the many that operate in Denmark's extensive wind energy sector in the North Sea.

The bill replaces the existing DIS Act, which specifically precludes bargaining rights for Danish unions, and is part of a major overhaul of Danish shipping regulations. **i**

## N

autilus has welcomed a decision by a crucial International Maritime

Organisation (IMO) meeting to reject industry pressure for a 'go slow' implementation of the global 0.5% cap on the sulphur content of marine fuel.

Delegates attending the Organisation's Marine Environment Protection Committee turned down a proposal for an 'experience-building' phase to assess fuel availability and safeguard against fuel-quality problems.

The shipowner groups BIMCO, Intercargo and Intertanko, together with the Marshall Islands, Liberia, Panama, the Bahamas and the United States, had tabled the plan to avoid 'unduly penalising individual ships' for non-compliance when the new limits come into effect in January 2020.

While the meeting agreed to stick to the deadline, delegates adopted a proposal to consider any evidence of non-availability of low-sulphur fuel or problems with fuel quality in May next year.

To tackle quality issues, the committee is issuing 'best practice' guidelines to assist crew, operators and owners with technical challenges that might arise.

The committee also upheld the plan to ban the carriage of non-compliant fuels by ships without an approved scrubber or another alternative arrangement after 1 March 2020.

Shipowner groups generally welcomed the agreements, although Intercargo said it remained concerned about safety issues. It also stressed the need for consistent and uniform enforcement of the rules by port state control authorities.

Nautilus professional and technical officer David Appleton commented: 'This is a welcome outcome and the only sensible decision that the committee could have taken. Responsible shipowners are calling for certainty and



Pictured above is the world's largest LNG bunker supply vessel, the Cyprus-flagged Kairos, which was delivered to Babcock Schulte Energy (BSE) last month.

Built at Hyundai Mipo Dockyard in South Korea, the

8,070gt ship is being deployed in the Baltic region to undertake LNG fuelling of ships including ferries, containerships, cruise vessels and shore-based gas consumers.

Capable of performing both ship-to-ship bunkering and

transhipment operations, Kairos has an LNG capacity of 7,500 cu m. The vessel has several other unique features, including a ballast-free design and installation of a CNG tank to store vapour return gas from customer vessels.

## SHIPOWNER GROUPS FAIL TO DELAY CLEANER FUEL

Union lauds IMO environment committee's decision to stick to implementation timetable for 0.5% sulphur cap...

effective implementation of the cap in order to provide a level playing field. The proposed "experience-building phase" would have only muddied the waters and created uncertainty for fuel oil suppliers, therefore exacerbating potential availability issues.

The IMO said the 0.50% sulphur cap will deliver benefits for the environment and human health, pointing to research into SOx emissions from ships which estimated that failure to change would result in more than 570,000 additional premature deaths worldwide between 2020-2025.

The meeting also discussed further proposals for reducing greenhouse gas emissions from ships — with the concept of mandatory speed caps or speed reductions set to receive detailed

consideration by the IMO. Further proposals will also be developed for the subsequent phases of the Energy Efficiency Design Index (EEDI).

Seafarer representatives voiced opposition to proposals to limit shaft power in order to meet EEDI requirements, but to allow for sufficient reserve power to be used in emergencies. 'This is a good idea in principle but hidden in the detail of the paper was a proposal to amend the regulation 21.5 of Marpol Annex VI, which is the only mandatory regulatory requirement that addresses minimum power required for safe navigation,' Mr Appleton explained. 'Nautilus is fully supportive of measures to reduce the environmental impact of shipping; however, such measures must be based on sound evidence and not jeopardise safety.' **i**





# MARITIME FACETIME

## Nautilus staged a lively event in 2018 at the Monaco Yacht Show offering advice and support to superyacht crews. DEBORAH MCPHERSON dropped in...

With the high-altitude artistry of a Red Arrows air display going on overhead, Nautilus aimed to bring a similar level of expertise to its three-day drop-in session at the ACREW lounge in the famous La Rascasse bar.



◀ Jorg Wendt of Antibes-based Nautilus partner D&B Services and Corine Archambaud of French union CFDT

The event, from 26-28 September 2018, provided information on matters such as sea service verification and the impact of the Large Yacht Code, and emphasised the benefits of Union membership in the superyacht sector.

Nautilus personnel were on hand to share their knowledge and answer questions, alongside representatives from the Union's yacht sector partners D&B Services, Hemisphere, Sovren, UKSA and Voyonic – and from two unions in the Nautilus Federation: CFDT (France) and SPH (Croatia).

Corine Archambaud of CFDT spoke of the help she provides to union members facing unfair dismissal and abandonment. Belonging to a Nautilus Federation union gives crews access to

free legal support and an international network of helpful connections, she pointed out – but you must sign up before you go to sea.

'The most important thing for seafarers is to ensure they know who their key contact is before they set sail,' she stressed. 'Often, when crew are contacting us, it is too late.'

Union officials can also help crew on issues as diverse as employment contracts, working hours, sexual harassment and tax, Ms Archambaud added. She cited a recent example where she had been called to help an abandoned charter yacht officer unfairly dismissed in Nice. Thanks to support from the international network of unions, as well as coastguard and port state control inspectors, the wages owed to the crew member were paid.

Jorg Wendt of Antibes-based D&B Services reminded visitors of the importance of the Nautilus Service Record Books – a free benefit of membership – and reported that, thanks to feedback from members, efforts were underway to improve the format of these.


'The wording is not as crystal clear as some people would wish it to be, in terms of logging onboard seatime, standby time or whatever hours, and it is causing a lot of confusion,' he

admitted. 'But the MCA [UK Maritime & Coastguard Agency] and Nautilus are in discussion to facilitate and streamline this process, and the MCA is open-minded to improvements.'

Commenting on the range of international regulations that had recently come into force to protect yacht crew, Mr Wendt said there were positive signs that owners were starting to pay more attention to their obligations. 'There is still a widespread assumption, however, that private yachts don't have regulations, and some people find it surprising you cannot have slaves onboard,' he added – only partially joking.

Masters and senior officers need to make themselves aware of the various regulations, including the Large Yacht Code, he added, 'as they cover safe manning, security, and stability of machinery, and it doesn't do any harm for junior officers to be aware of these as well.'

Looking back on a successful three days of listening and information-sharing, Nautilus strategic organiser Danny McGowan told the Telegraph: 'It's clear from what we have heard at Monaco that being prepared for the unexpected before you set off is really important – even if you think you are on a well-run yacht.'

'Nautilus's package of benefits and protections are unmatched by any other union or crew association. With assistance from our colleagues in the unions affiliated to the Nautilus Federation, access to our 24/7 helpline, legal support and worldwide directory of lawyers, joining Nautilus should be the first thing all maritime professionals do in the superyacht industry so they know where to go in an emergency.' 



▶ Nautilus strategic organiser Danny McGowan (left of picture) assisting a visitor to the Nautilus drop-in event  
Image: Vana Bosto

# #METOO, SAY YACHT CREW

Behind the glitz and glamour of the superyacht sector can be found some highly unsavoury behaviour, heard DEBORAH MCPHERSON at a special seminar...



The yachting industry must take action on sexual abuse and harassment, delegates were told at the Monaco Yacht Show 2018.

Research by the Professional Yachting Association (PYA) was presented to the yacht show's Sea Changes seminar in September, showing that 40% of yacht crew have experienced unwanted sexual contact, mostly from colleagues.

Drawing on a survey of 820 yacht officers, interior crew and shoreside staff, the findings showed abuse was not confined to women – although women tended to describe the abuse in the survey in more harrowing detail. Examples were read out to the seminar of gender coercion, groping, and being drugged and raped while on a night out with crewmates.

The PYA said it had decided to investigate sexual harassment after seeing a marked increase in the number of incidents of unwanted sexual contact reported by crew members, and in light of the recent global #metoo movement, which revealed the prevalence of sexual assault and harassment against women in all careers.

Commenting on the findings, Sea Changes panel member Karine Rayson – who runs The Crew Coach professional development web service and blog – said it was no coincidence the industry was experiencing a costly high turnover of crew, many of whom had longstanding vessel knowledge or were crucial to running the vessel.


'Yacht managers are telling me there is burnout, or people taking a lot of sick leave,' she reported. 'Mental health conditions that can exhibit as a result of abuse include depression, OCD, personality disorder and substance abuse.'

Having a safe place and someone to approach who can be trusted with confidential information is key to managing abuse, emphasised the PYA speakers. Crew should also receive training on what bullying and harassment means, and employers should have anti-bullying policies and take action against perpetrators.

The seriousness of the problem in the yacht industry was illustrated by a well-publicised American yachting sexual harassment case, cited at the seminar, where a crew member won a US\$70m settlement.

In Europe, duty-of-care issues have been highlighted by a case where a long-serving stewardess, who had been drinking with crewmates during World Cup celebrations, was put to bed inebriated in her cabin, but found dead the next day. Investigations are ongoing.

In another tragic example, a 21-year-old Australian deckhand had suffered a 'series of issues regarding job performance and issues with crew and hanged herself.'

The survey also noted a potentially worrying trend that the majority of respondents had secured jobs through social media and did not come through the safer option of crew agencies. 

**40%**  
of the yacht crew surveyed by the PYA had experienced unwanted sexual contact



## US OWNS MOST Union secures member's wages

The United States has the largest number of superyacht owners, a new study has revealed. According to a report from investment managers Knight Frank, there are 406 US yachts of 40m and above, followed by 168 in Russia and 107 in Greece. The study found 96 superyacht owners in the UK and 54 in Saudi Arabia. **i**

Nautilus has obtained some US\$30,000 in wages owed to a superyacht member after arranging the arrest of his vessel in France last month.

The member had contacted the Union to report that he had not been paid for two months after being told by the owner's representatives that his contract was being terminated with no notice.

The private yacht was about to sail from Antibes to the Caribbean and, working with the

International Transport Workers' Federation (ITF), Nautilus had the vessel arrested to enable the member's claim to be resolved.

Charles Boyle, director of Nautilus legal services, said: 'As this was a private yacht, we could not recover the money through the MLC financial security provisions, and so we had to arrest it. This was a good example of the support that the Union can provide, with the back-up of the ITF.' **i**

## Royal Mail ship set to become a private yacht

The former Royal Mail Ship St Helena has arrived back in the UK and could become a private yacht, according to press reports.

The 6,767gt vessel – which provided a lifeline service to the South Atlantic island between 1990 and February this year – is

pictured arriving in Portland following a short-lived spell as a counter-piracy support ship under the name MNG Tahiti.

Now flying the St Kitts & Nevis flag, the ship has been re-named St Helena and sold to a Jersey-registered firm, St Helena LLP. The

maritime newspaper TradeWinds reports that the new owner of the ship is connected to the Formula 1 racing industry and plans to send it for a two-year conversion into a private yacht.

**i**  
Image: Paul Dallaway



## Court rules on detained yacht FATAL COLLISION PROBED

A superyacht which was stranded in the United Arab Emirates after being caught up in a bitter divorce battle has been freed to sail by a court in Dubai.

The 115m yacht Luna was arrested in Port Rashid as part of a disputed £453m settlement of divorce proceedings between the Russian owner, oil and gas tycoon Farkhad Akhmedov, and his ex-spouse, Tatiana Akhmedov.

But Dubai's Sharia Court ruled last month that a commercial court in the

Arab kingdom has no right to uphold a freezing order enforced by a UK court, and that the vessel belongs to Mr Akhmedov.

Some legal experts suggest the ruling will not end the dispute, as not all the legal channels in Dubai have yet been exhausted.

Nautilus intervened in the case earlier this year after members onboard the Luna had their passports seized by local authorities in Dubai. **i**

Authorities in the United States are investigating a fatal collision involving a superyacht and a fishing charter boat.

One man died and two others were injured when the 100m Attessa IV collided with the 19m fishing charter boat Prowler off the southern California coast.

A US Coast Guard helicopter and two boats rescued 17 people from the damaged fishing boat and a further 10 passengers were transferred to Attessa IV, which then took them to San Diego.

The causes of the collision are now the subject of an investigation which is expected to take around six months to complete. **i**

## Nautilus calls for partnership to prevent another Indian Empress

Nautilus has won a long battle to secure almost US\$1m in unpaid wages for crew members from the superyacht Indian Empress, which was abandoned by its owner over a year ago.

The Union has been representing the interests of crew on the 95m yacht, which was arrested in Malta in March 2018 after being abandoned by its owner, Kingfisher beer and Formula 1 Force India tycoon Vijay Vittal Mallya, in September 2017.

The Nautilus legal team then managed to secure an initial total of US\$615,000 in owed wages following discussions with the superyacht's P&I club under the terms of the Maritime Labour Convention's financial security provisions.

Following the judicial sale of the vessel to the company Sea Beauty Yachting for €35m in September 2018, the Union's lawyers have been working with court authorities in Malta

to ensure that crew are paid the remainder of their outstanding wages as part of the process to pay all the creditors – including suppliers, service providers and financiers – who were owed money by Mr Mallya.

A total of US\$290,426 has been secured through these negotiations, with individual payments ranging between US\$1,300 to \$55,000 and averaging \$20,745.

One member told the Union: 'On behalf of all the other crew I would like to thank you and your team for your hard work with our situation. We appreciate it all!'

Nautilus international organiser Danny McGowan commented: 'We are glad that we were able to help our members in this way. It is so important that maritime professionals working onboard superyachts join Nautilus before they encounter this type of issue, as waiting until they have a problem normally means that it is too late.'

'If the owner had a relationship with Nautilus, we are sure that we could have resolved the issue without resorting to arresting and selling the vessel,' he pointed out. 'Again, we issue our call to superyacht owners, managers and other potential strategic partners to work with us to try and prevent situations escalating as they did here.'

Head of legal services Charles Boyle said he was pleased to see the end of the long-running case. 'It has been a complicated process, which was not helped by the first sale falling through. However, it has demonstrated the importance of the Maritime Labour Convention's financial security amendments, which meant that the P&I club Skuld paid up to four months' wages owed to crew members earlier in 2018. Had those provisions not been there, the members would not have received this money at that stage, so the value of the MLC is very clear.' **i**



The Dutch builder Oceanco has launched the 109m superyacht Project Bravo – the first vessel built to its new LIFE (Lengthened, Innovative, Fuel-efficient and Eco Friendly) design and build philosophy.

'The LIFE design's use of advanced hybrid propulsion, which

incorporates significant battery capability, is combined with a single-tier engine room that allows novel use of space for outstanding luxury accommodation,' said Lateral Naval Architects director James Roy. **i**



# FAIRER TREATMENT ACROSS A CONTINENT

The global fight for seafarers' rights received a boost last month as key Asian nations pledged to improve the way they deal with maritime accidents and incidents. **ANDREW LININGTON** reports...

**H**igh-level talks between 10 Asian countries have secured a 'crucial' agreement on regional action to enforce the global guidelines that aim to prevent seafarers from being criminalised after accidents.

The meeting in Manila – which was attended by representatives from some of the world's biggest seafarer supply nations – agreed a statement pledging increased cooperation to secure the 'proper and effective implementation' on the guidelines for the fair treatment of seafarers following maritime accidents and incidents.

Delegates from countries including China, India, Vietnam, Bangladesh, Myanmar and Indonesia agreed to work together to raise awareness of the guidelines and to develop resources, knowledge and expertise across the region to assist with their enforcement.

The Manila meeting was the first to be held after an international conference in 2017 recommended a programme of such events to encourage more countries to bring their national legislation into line with the fair treatment guidelines.

The initiative is being led by the London-based organisation Seafarers Rights International (SRI), which has highlighted the slow progress being made across the world to implement the guidelines since they were agreed

Pictured at the fair treatment meeting in Manila are Philippines employment minister Silvestre Bello, SRI executive director Deirdre Fitzpatrick, and ITF general secretary Stephen Cotton



by the International Maritime Organisation and the International Labour Organisation in 2006.

It comes as Nautilus International has highlighted continued member concerns over the threat of criminalisation, with a survey showing that 87% of maritime professionals are worried about the potential for being treated as a scapegoat after an accident and 70% saying that it affects their desire to work in the industry.

Speaking at the Union's UK branch symposium on criminalisation in October 2018, SRI executive director Deirdre Fitzpatrick said research had shown that just one-third of IMO member states had implemented the guidelines into their national legislation, one-third said they followed the guidelines and the remainder did nothing at all.

As well as prosecutions arising out of pollution, collisions, fatal accidents, shipwrecks and groundings, she said there are a growing number of cases

involving allegations of bribery, breaches of customs and security rules, drug and fuel smuggling, human trafficking and illegal cargoes.

Ms Fitzpatrick welcomed the Manila agreement as a 'crucial step in the fight to raise awareness over the fair treatment of seafarers'. The decision by major Asian countries to back the guidelines is significant, she added, and should pave the way for other regions to follow suit.

International Transport Workers' Federation (ITF) general secretary Stephen Cotton attended the meeting and congratulated the Asian nations for the agreement.

Mr Cotton said the ITF is 'totally committed' to making the statement a success. 'Now the hard work begins,' he added. 'We must create an implementation plan to roll out the statement to ensure that every seafarer feels the benefits of what has been agreed here; that they receive fair treatment.' **t**

# THE VALUE OF CONSISTENCY

A research project is assessing the benefits of crewing policies that keep the same team together across multiple voyages. **SANDRA SPEARES** heard the initial results...

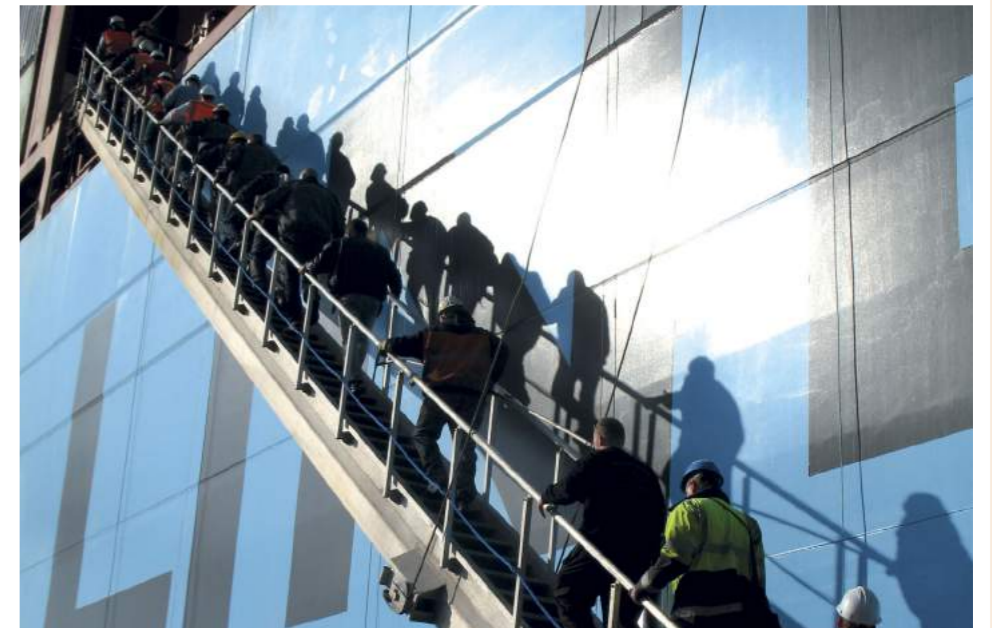
**A**dopting stable manning strategies could make ships safer and more efficient, a conference of leading ship owners and managers was told last month.

Delegates at the fifth annual International Shipowning & Shipmanagement Summit heard preliminary findings of Solent University research to examine the potential benefits and challenges of implementing more consistent crewing policies.

The study is comparing the impact of implementing back-to-back schedules for the four most senior officers with the more 'fluid' system of assignments to different ships and sailing with different crews on each trip.

Project leader Dr Kate Pike said crewing costs are the largest single operating cost – representing about 50% of the total – and proper crewing strategies are therefore essential. There is at present little information available about the benefits of keeping shipboard teams together, but there is an opportunity to learn from other industries, such as aviation.

The Solent University research has considered the external factors influencing manning systems, such as international or national legislation. It has also addressed the role of elements such as labour sources, crew nationality and vessel trading patterns. Significant changes in fleet size make it difficult to have a regular stable team, Dr Pike noted, so companies use manning pools to get around this. There is also a potential impact on promotion opportunities within a company when a strict stable team system



is being used. Benefits seem to outweigh challenges, however.

The study has included a questionnaire which was completed by more than 100 respondents and extended by interviews and two case studies. Feedback shed light on such factors as safety, efficiency and best practice in crewing policies.

As well as delivering financial benefits, the stable strategy could prove advantageous in other ways. Dr Pike said the survey indicated that crews took on 'ownership' of the vessel if they were returning to it and wanted to leave it in a good condition, with resulting maintenance and safety benefits. There was also a potential increase in personal accountability, as respondents said they wanted to instil a better safety culture onboard.

Companies with stable teams said these fostered a greater sense of responsibility, with implied safety and maintenance benefits linked to the time the team stayed together.

▲ Does it make a difference if your colleagues change each time you join a vessel?

The optimum time for a crew to stay together is about two to three years, the research suggests, but onboard culture needs to be considered as part of that timeframe, which could result in it being extended or reduced.

There were also shorter handover times as people got to know each other, and better retention – although there might be challenges if a team member went sick, for example. There was greater collaboration and team spirit and improved abilities to respond in difficult circumstances.

The downside to stable teams was the potential for complacency to creep in, Dr Pike said, and the right questions need to be asked to monitor the strategy given the length of different voyages. Actual costs were difficult to quantify, the researcher added, and her team would like to work with an individual company to produce more detailed conclusions. **t**





# INLAND INSIGHT

Europe's inland navigation industry is facing major challenges to get the investment it needs in a new generation of vessel crews and a modern, environment-friendly fleet, Nautilus Council members heard last month...

**P**resenting his final report to the Nautilus Council on inland waterways transport (IWT), the Union's now retired international officer Nick Bramley said there is a mixed pattern of operations in the European sector – with freight levels being largely stagnant, while passenger cruises are booming.

The latest annual report from the Rhine Commission shows that inland waterways carry around 6% of European freight, and cargo volumes have been rising at an annual average of 1% over the past two decades – while passenger numbers soared by an average annual rate of 13% between 2012 and 2016. There are currently some 13,500 vessels in the European inland navigation freight fleet, with a total cargo capacity of 17m tonnes and employing around 30,000 people.

The river cruise fleet has more than doubled over the past 13 years. There are now 346 active vessels, with a total passenger capacity of more than 50,000, and 17 new boats entered the market last year. The number of jobs on cruise vessels has increased to almost 14,000. Operators are reporting skill shortages in some parts of the industry, and inland navigation is also facing the problems posed by an ageing workforce – with 38% to 41% of qualified crew members in key countries such as the Netherlands, Germany and Belgium aged over 50.

There have been attempts to tackle these issues by making the industry more attractive to young people, and new entrant numbers rose in the Netherlands, Romania, the Czech Republic and Serbia between 2009 and 2015. Nautilus has been involved in these initiatives, and in discussions on new qualifications and clearer rules on work and rest times.

'The fleet itself is under-funded and getting older, with around 50% of vessels being over 50 years old and 15% being more than 75,' Mr Bramley continued. New tonnage – with greener propulsion systems – is

urgently needed if IWT is to keep an environmental edge over road transport. Only nine of the 187 new vessels built between 2014 and 2016 meet the emission performance standards that are being introduced in 2019 for new engines.

Mr Bramley reported that Nautilus had recently been involved in discussions over the potential for autonomous inland waterway vessels, and the European Transport Workers' Federation had organised a seminar to assess the issues.

'The development of automation will be complicated, not least due to the complex regulatory systems,' he noted. 'Higher levels of automation are probably beyond the resources of the mass of owners.'

'There is a widespread assumption that the removal of the human error factor under automation will make shipping safer,' he added, 'although there is little or no research on this. The reduction of remaining crew members to the role of mere observer could even create new hazards, and the nature of IWT, with high traffic density on rivers with varying water levels and currents, would require a dense network of onshore equipment.'

'As in maritime transport, automation raises legal questions on issues such as liability, life-saving, and certification,' Mr Bramley pointed out. 'And considering the small numbers of crew members on inland waterway vessels – usually between two and five per barge – large-scale reductions could bring social problems and reduce the attractiveness of the profession.'

Concluding his report, Mr Bramley said that Nautilus is working to increase Union membership in the sector, but there are major obstacles to this. It is hard to secure collective bargaining agreements because so many companies are small, he said, and up to 80% of the vessels are run by owner-operators. **i**

# LEVELLING THE PLAYING FIELD



The ILO sets an international minimum wage for seafarers – a measure unions strongly support, as it helps prevent members from losing their jobs to cheap labour. In the latest round of negotiations to set minimum wage rates, the seafarers' side was led by the Nautilus general secretary...

**N**autilus general secretary Mark Dickinson has welcomed the outcome of top-level talks on the international minimum wage for seafarers in late 2018.

Mr Dickinson led the seafarers' side in the two days of negotiations between the International Transport Workers' Federation (ITF) and the International Chamber of Shipping at the International Labour Organisation's (ILO) Joint Maritime Committee.

The meeting agreed to update the minimum wage for an able seafarer by US\$27 over the next three years, to provide an overall increase of 4.5% on the current rate of \$614. There will be an increase of \$4 as of 1 July 2019, followed by an increase of \$7 as of 1 January 2020 and a final increase of \$16 as of 1 January 2021.

Mr Dickinson admitted that the increase had been hard fought. 'We started slowly but gained momentum as the parties exchanged opinions and provided arguments to support their positions,' he said. 'There was strong opposition from the shipowners' side for a significant increase.'

Dirk Max Johns had opened the negotiations for the shipowners,

▲ Nautilus general secretary Mark Dickinson (front, centre) with Dirk Max Johns of the International Chamber of Shipping and members of the ILO Joint Maritime Committee

acknowledging that statistics showed global seaborne trade was doing well and shipping has held up well during a 10-year economic downturn.

However, he pointed out that the costs of new regulations, a rise in operational costs and continued global political uncertainty meant that there were still many 'ifs' involved in the industry remaining financially secure.

'It will require good management, good judgement, good research, good advice and good luck to remain profitable, he concluded.

In his opening statement for the ITF, Mr Dickinson noted: 'It is clear from the preparatory papers for this meeting just how hard the decision, taken by this meeting two-and-a-half years ago not to increase the minimum wage has hit seafarers.'

'Within the 55 major maritime countries, seafarers have seen the spending power of the minimum wage fall in all but seven of them. In some cases, the falls have been dramatic – seafarers in seven countries have experienced their minimum pay fall in value by more than 15%.'

Mr Dickinson said that global trade is fundamentally healthier than it had been

for a decade and revenues were up, making it a 'fortuitous moment' to address the wages of seafarers.

He also called on shipowners not to treat the minimum wage as a maximum wage, which is a reality for many seafarers, and argued for the introduction of sanctions for member states that completely ignore the ILO minimum.

'Only then will we have Fair Pay at Sea,' he concluded. 'As the ILO approaches 100 years of striving for social justice and decent work, that seems to me to be an appropriate goal.'

The two sides also agreed to find ways to ensure that the ILO formula used as the basis for negotiations remains fair and reflects the reality for seafarers and the industry.

Following the negotiations, Mr Dickinson admitted that the two sides had begun very far apart, with shipowners initially looking for a reduction in the current level of pay. Fears of a stalemate were overcome, and it was also agreed to reconvene in 2021 to further review the figure.

'We have fought hard to maintain an international minimum standard, and we are determined to continue to increase that figure,' Mr Dickinson stressed. **i**



# BREXIT VOYAGE INTO THE UNKNOWN



Image: Thinkstock

There's been a lot of talk about a no-deal Brexit making life harder for seafarers with UK certificates, but what would this actually mean in practice? From Brussels, **JUSTIN STARES** looks at what the future could hold...

**'N**o deal' would mean 'no favours', and that's not good news for seafarers who hold UK-issued certificates. As the European Commission has warned, the UK would under this scenario be treated as any other third country seeking permission for its seafarers to work on ships flagged within the European Union.

Existing UK certificates would remain valid until expiry, but, according to the Commission's hardline interpretation of the rules, certificate holders would not be able to switch jobs between ships registered in the various EU flag states.

While hard Brexit therefore looks grim both for British seafarers and thousands of others across the Commonwealth and

elsewhere, all is not lost.

If the UK is forced to re-apply for EU recognition, the request is almost certain to be approved. British education and training standards already meet the European requirements, and there is no reason to expect objections when EU governments meet in the secretive Brussels committee that decides the fate of third country seafarers.

The only real question is: how long would re-recognition take? If it's a quick, seamless procedure, then UK certificate-holders could soon find themselves back in the European fold.

Officially, the assessment of the recognition application should take 18 months. This period is, however, in the Commission's own words, 'not realistic'. The team of inspectors

at the European Maritime Safety Agency (EMSA) already can't keep up with their ever-expanding rounds of 'visits' (the term 'inspection' is out of favour in today's Euro-sceptic world). The UK would have to wait in line for inspections that would in all probability turn out to be a mere formality.

EU rules on recognition applications, which are currently being redrawn in Brussels, set out two years as a more reasonable timeframe. Prior to applying, the UK would need to find an EU sponsor (again, not a problem: allies such as Malta would surely be willing to help). So, when you factor in a few months of mindless bureaucracy, three years seems achievable.

There is only really one 'but'. If there is any kind of problem with the Brussels inspection process, delays could soon add up. As other applicants have experienced, Brussels lives in its own time zone: GMT + ages.

Japan, which convinced Cyprus to act as its sponsor, applied for EU recognition in 2005. It took until November 2014 to push the paperwork through the Brussels machinery – that's nine years. According to the official version published at the time, the delay was due to Japan's reluctance to accept an EMSA inspection on sovereignty

grounds. Despite the fact that the country's training system was largely up to scratch, 'lengthy discussions on the legal framework of the EU' were required.

In comparison, Bangladesh was processed quickly. Bangladesh secured three EU sponsors – Cyprus, Italy and Belgium – who collectively put in an application in July 2007. By December 2011, Bangladeshi seafarers had the Brussels green light to work on ships flagged within the EU. That's four and a half years.

For Fiji – sponsored by Germany – it took just over six years: from February 2011 to August 2017, plus a few more months until space could be found to publish the decision in the EU's official journal.

Technical glitches can be compounded by the discovery of substandard training institutes. If even one institute is not up to STCW standards, the others risk having to wait while remedial action is taken. Presumably, the UK's application would not suffer this fate.

Then there's the 'goodwill' factor. Or rather, the lack of it. The Commission in theory operates according to the rule of law. In practice, however, it is a political body with its own priorities. If one of those priorities were to make the UK's life as difficult as possible – in order to dissuade other countries from leaving the EU – could the Brussels executive, acting out of spite, deliberately hold up the UK's recognition application? That's anyone's guess, though mine is that it's possible.

On the plus side, once you're in, you're in. There have been very few cases of third country providers of seafarers who have seen their EU recognition removed: as few as two, according to old hands in Brussels. To have your recognition removed, you have to be engaged in the wholesale issuance of fraudulent certificates (as was the maritime authority in one former Soviet republic) or something similarly grave.

Not even the widespread discovery of substandard training centres was enough to see recognition removed from the Philippines, a country which was instead funnelled into a decade-long

procedure involving multiple threats and numerous EMSA 'visits', all designed to encourage reform. These efforts have met with mixed success, judging by the fact that discussions regarding Filipino reforms are still ongoing in Brussels.

According to shipowners' sources, the Commission backed off from de-recognition because there are simply too many Filipinos working on EU-flagged vessels. These claims are difficult to assess, because statistics regarding seafarers – where they exist at all – are notoriously inaccurate. When Brussels was threatening the Philippines, anywhere between 5,000 and 60,000 jobs were said to be at risk.

The same uncertainty applies to holders of UK certificates and their relative strength within the EU fleet. Figures compiled by EMSA in 2014 suggested there were around 220,000 EU seafarers and that the UK issued 28,865 certificates of

competence that year, making the UK the largest issuer in the EU. These figures were, however, based on 'potential manpower' rather than the number of active seafarers, which was unknown.

The extent to which operations onboard EU-flagged ships would be interrupted if all UK certificate holders were effectively flung out is therefore a tricky question. The EU does, however, recognise around 50 providers of manpower from around the world. It is therefore a fair bet that the replacement of one certificate provider would not be an insurmountable task.

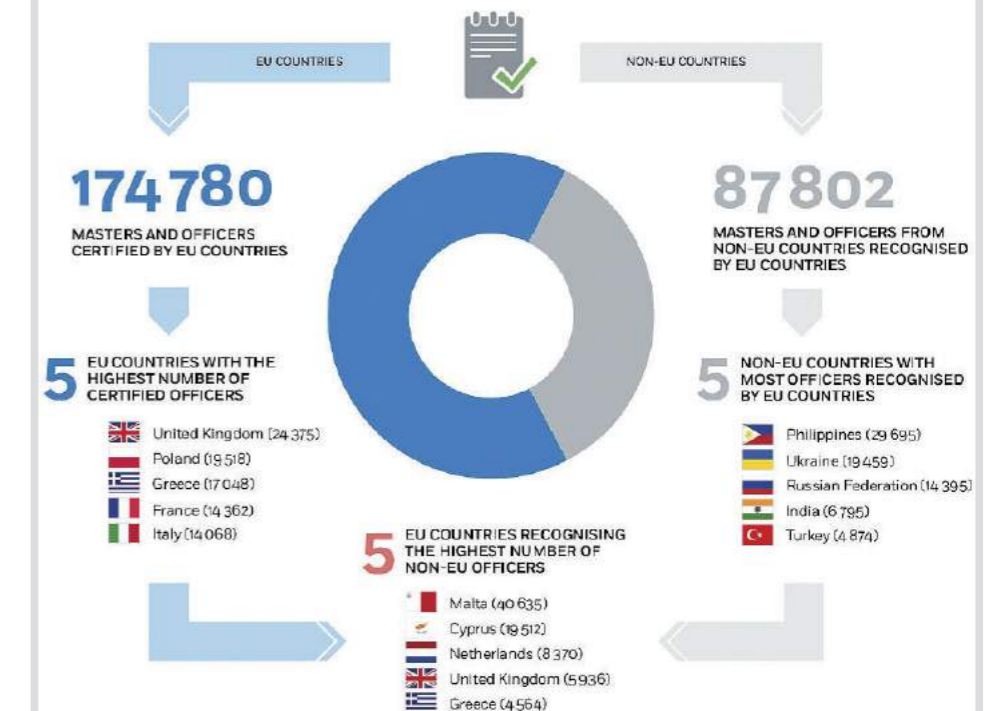
In conclusion, a no-deal Brexit would not necessarily be a disaster for UK certificate holders, though it would launch them on a journey into the unknown: all of which is unlikely to be reassuring for those currently considering revalidation.

**Justin Stares** is editor of [maritimewatch.eu](http://maritimewatch.eu)

The European Maritime Safety Agency keeps data on the certificates issued by member states

## SEAFARER STATISTICS IN THE EU

A SNAPSHOT OF SEAFARERS HOLDING CERTIFICATES OF COMPETENCY & ENDORSEMENTS ATTESTING RECOGNITION BY EU COUNTRIES VALID IN 2016, AS REPORTED IN EMSA'S STCW INFORMATION SYSTEM





# OCCUPATIONAL HAZARD?

The latest results from the Nautilus criminalisation survey  
 Graphic: June Cattini-Walker/  
 Thinkstock images

**C**riminalisation continues to be a huge concern among maritime professionals

– and it is posing a big threat to recruitment and retention, as the October 2018 Nautilus Fair Treatment Symposium heard.

A new survey carried out by the Union has updated the results of similar research undertaken almost a decade ago, and shows that 87% of seafarers are worried about the threat of criminalisation – slightly down from 92% in 2010.

Some 70% say the threat has an impact on their desire to remain at sea – up from 66% in 2010, said head of strategy **Debbie Cavaldoro**.

Presenting the preliminary findings of the survey to the meeting, she said it was clear that concerns about the risk of criminalisation extend across the world, and there appear to be an increasing number of court cases against crew and a lack of protection from companies. ‘There are intense industry pressures, but no margin for human error,’ she noted.

Around 15% of the 500-plus respondents reported that they had been directly involved in legal action – 30% of which involved civil action, 20% maritime administrative action and 20% criminal action.

Of those involved in action, about one-third contacted their union for help and around one-quarter were supported by their employers.

Survey respondents – who belong to the 19 unions in the Nautilus Federation – said they felt most likely to be criminalised as a consequence of



## CRIMINALISATION SURVEY RESULTS

### DO SEAFARERS STILL FEAR CRIMINALISATION?

2010	2018
92%	87%
66%	70%
52%	84%

**Concerned** about criminalisation of maritime industry

**Affects** desire to work in industry

**Pollution** considered to be most likely to cause of possible criminalisation



### OTHER CAUSES

- Collision
- Scapegoat for others
- Injury onboard
- Incorrect paperwork

### INVOLVED IN LEGAL ACTION RESULTING FROM A MARITIME INCIDENT...

15%



### OF WHICH...

- 30% Civil action
- 20% Maritime administrative action
- 20% Criminal action
- 30% Other action





pollution incidents. Three-quarters said they wanted to see more information about the legal rights and responsibilities.

Ms Cavaldoro said Nautilus is working to address this need and to provide more support to members on top of the existing 24/7 helpline, its worldwide network of lawyers, and the JASON advice and assistance scheme run in partnership with Nautilus Federation unions.

The Union will be launching a new mobile app, she reported, giving members instant access to advice following an incident, as well as facilities to record reports straight after incidents.

The symposium then heard from a panel of expert speakers who examined different aspects of the legal challenges faced by seafarers.

**Deirdre Fitzpatrick**, director of the legal research centre Seafarers' Rights International, said criminalisation has been a high profile issue for more than 20 years and shows no sign of diminishing.

'Even if the chance of being involved in a criminal action is small, the perception is high, and that is why it is important to address,' she said.

Although there is no reliable data to show the scale of the problem, it is clear that typical cases arise from pollution, collisions, fatal accidents, shipwrecks and groundings, Ms Fitzpatrick said.

There are also a growing number of cases involving allegations of bribery, breaches of customs and security rules, drug and fuel smuggling, human trafficking and illegal cargoes – often in circumstances where seafarers are in unfamiliar situations.

She reminded the meeting of cases such as the jailing of the master of the tanker *Prestige*, the detention of the crew of the tanker *Tasman Spirit* and the imprisonment of the master and chief officer of the tanker *Hebei Spirit*. 'A common theme in all of these cases was a strong view that prosecutions should never have been brought and that seafarers were scapegoated and laws were unfairly applied,' she added.

Ms Fitzpatrick spoke of the work being done to encourage countries to implement and enforce the international guidelines for the fair treatment of seafarers following maritime incidents. SRI had found that around one-third of major maritime nations had not done anything to bring the guidelines into their national legislation, she pointed out.

● ● ●  
**'A common theme in cases like the *Prestige*, *Tasman Spirit* and *Hebei Spirit* was that seafarers were scapegoated and laws were unfairly applied'**



▲ Deirdre Fitzpatrick, director of the legal research centre Seafarers Rights International

'Criminalisation still presents one of the greatest risks for seafarers on a daily basis,' she warned, 'and we have to continue to challenge the tendency for criminalisation and eradicate the attitude that seafarers are problems rather than solutions in such situations.'

International Transport Workers' Federation maritime coordinator **Jacqueline Smith** highlighted the need to gather more data on the problems to better understand the nature of the risk.

'With proper information we could identify patterns such as the geographical areas or the countries where seafarers are most likely to be criminalised,' she argued. 'We could establish whether certain nationalities of seafarers are more at risk, or if the problem is higher with certain types of ships or certain flags, and this could help us to focus our efforts on where we should be promoting the need for fair treatment guidelines to be incorporated into national law.'

Ms Fitzpatrick said the problems that seafarers face are exacerbated by the difficulties in finding lawyers who have adequate knowledge of shipping and maritime labour issues – with cases in which seafarers have been convicted where judges did not understand what a bill of lading is. 'Ignorance of the maritime industry can go up to the highest levels, and it is a really important aspect in defending seafarers,' she added.

Ms Smith said the ITF had identified a trend of increasingly complex legal cases involving seafarers, and there is a need to ensure that maritime professionals are given timely advice and assistance in such situations. Companies should also do more to support crews, she added, as they have a vested interest in resolving situations quickly.



▲ Above: Jacqueline Smith, International Transport Workers' Federation maritime coordinator



▲ Above left: Debbie Cavaldoro, head of strategy, Nautilus International

**Helen Kelly**, from Lloyd's List, described the work done by her newspaper to reveal the widespread failure by many flag states to publish accident investigation reports. The resulting lack of adequate information about the causes of incidents helps to fuel the blame culture and the scapegoating of seafarers, she pointed out.

Ms Kelly said that flag states had failed to provide 58% of all very serious casualty reports that should have been submitted to the International Maritime Organisation over the past four years.

Major flag states like Panama, the Marshall Islands, Liberia, and China have the worst records, she noted, and it is possibly right to consider the introduction of penalties for countries that consistently fail to publish accident investigation reports.

**Natalie Beswetherick**, director of practice and development at the Chartered Society of Physiotherapy, contrasted the harsh treatment of seafarers following incidents with the processes for dealing with cases involving the medical profession in the UK – with criminal prosecutions of medical practitioners being very rare.

▲ Natalie Beswetherick, director of practice and development at the Chartered Society of Physiotherapy  
 Images: Colin McPherson



Incidents involving physiotherapists and all other health care personnel – other than doctors and nurses – are investigated by the Health & Care Professions Council, she explained. This will examine such cases as reckless or deliberately harmful acts, fraud and improper relationships with service users and will determine whether someone is 'fit to practise'.

Sanctions can take the form of being struck off or suspended from the register, conditions being placed on practice, or a caution. The CSP provides medical malpractice cover for its 57,000 members, in the same way that Nautilus provides certificate

protection and legal support for its members.

Ms Beswetherick said she was horrified by the way seafarers are treated, and she noted the multiple jurisdictions that maritime professionals can be exposed to. Incidents may often be the result of an error of judgement, she pointed out, and in cases where there is no intent it is wrong to bring a criminal case. The frequent failure to fully investigate shipping accidents is in sharp contrast to the approach taken in the health care sector, she added. 'A full investigation can show systemic failures, and if you don't look at the full context of an incident it is deeply unfair. 'Sometimes it is the organisation that could be at part-fault because of things like a lack of investment or poor processes.'

**Michael Lloyd** said he believed seafarers had been let down by the International Maritime Organisation. But general secretary **Mark Dickinson** said it was unfair to blame the IMO – which is currently led by a former seafarer – and the focus should instead be placed on flag states.

**Malcolm Graves** said it is usually a 'lottery' as to whether or not a seafarer will be supported by the employer after an accident. But **Tim Springett**, from the UK Chamber of Shipping, said the owners would be keen to progress a 'social partnership' approach to promoting the adoption of the fair treatment guidelines by governments.

**Ian Hampton**, chief people and communications officer with Stena Line, said his company would always stand by its seafarers in the face of a 'toxic and contagious' blame culture. 'Unless we are able to identify the root causes, we will always have this fanaticism about finding someone to blame,' he added. **📌**

There is still time to take part in the Nautilus criminalisation survey – go to [www.surveymonkey.co.uk/r/FairTreat18](http://www.surveymonkey.co.uk/r/FairTreat18)



# OUR WATERS OUR WORKERS

Nautilus International has called for countries such as the UK, the Netherlands and Denmark to re-introduce cabotage laws, after a major new study showed that more than two-thirds of maritime nations around the world have regulations to restrict foreign operations in their coastal trades...

**T**rade liberalisation, free markets, open competition – that's what the shipping industry is all about, isn't it? Seafarers in many countries have long been told that global business requires them to put up with being undercut by cheaper foreign labour. But new research has revealed that numerous nations are doing just fine with a form of protectionism in their coastal waters.

Described as one of the most comprehensive studies of its kind, the Seafarers' Rights International (SRI) report – **Cabotage Laws of the World** – provides the first independent analysis of maritime cabotage laws for more than 25 years.

Based on an analysis of legislation and feedback from lawyers in 140 countries, the report reveals that 91 countries – representing 80% of the world's maritime states – have some form of cabotage regulations.



Seafarers' Rights International executive director Deirdre Fitzpatrick

● ● ●  
**'The SRI report debunks the myth that cabotage is an exception, not the rule. These findings will assure governments that it makes sense to enforce national cabotage laws'**

The study says the nature of cabotage laws can vary, but they are usually geared towards: protecting local shipping industries; ensuring the retention of skilled maritime workers and the preservation of maritime knowledge and technology; safeguarding fair competition; promoting safety; and bolstering national security.

It points out that countries have been implementing cabotage policies since the 14th century, and many of the measures now in place around the world date back to laws brought into effect in the 19th century.

The report – commissioned by the International Transport Workers' Federation (ITF) – says there is no single, internationally agreed definition of cabotage, and various regional and national laws can refer to terms such as coastal trade, coastwise trade or domestic trade as alternatives.

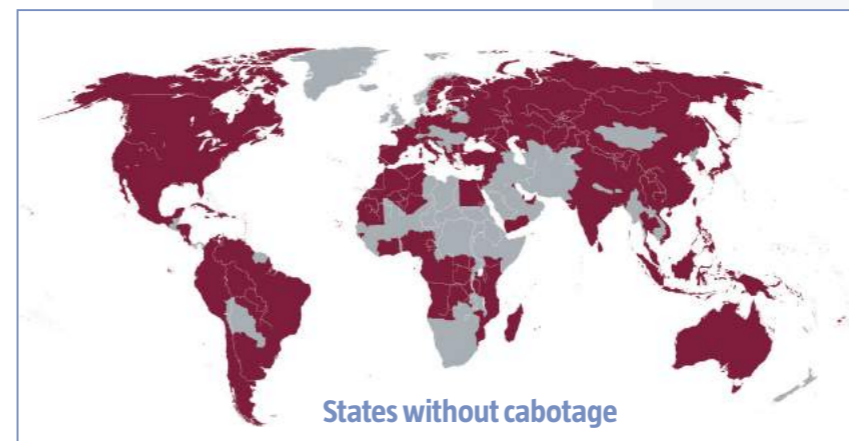
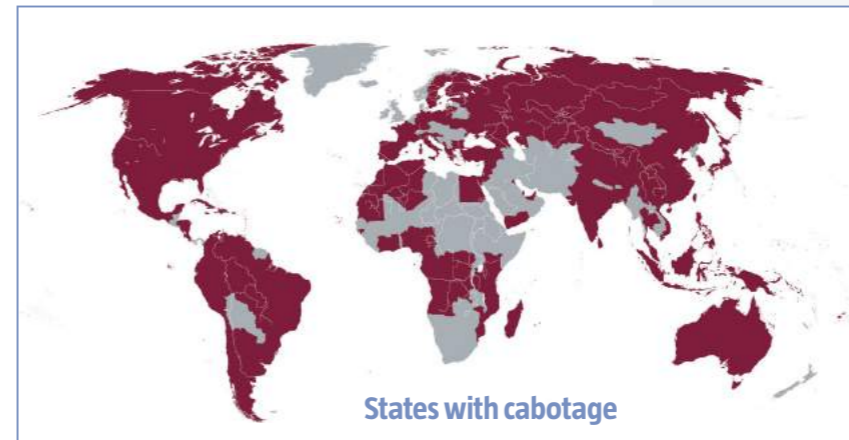
However, it points out, cabotage is usually understood as covering shipping services between two ports located in the same country or exclusively within a country's territorial waters.

Researchers said previous studies had shown there were at least 33 countries with cabotage restrictions in place in 1920, and at least 40 out of 53 maritime nations had cabotage policies in 1991.

The countries that now have no cabotage restrictions include the UK, the Netherlands, Denmark, New Zealand and South Africa, according to the SRI study.

It says there is a diverse range of restrictions imposed by the 91 countries that have cabotage rules – although they are often linked to requirements to use national-flagged, national-crewed ships. 'Reservations regarding the manning of vessels are also common,' it adds.

Some cabotage restrictions are linked to certain trades and services, or certain types of ship, and



sometimes it is extended to the exclusive economic zone or the continental shelf.

In many countries, cabotage laws are backed up by penalties, fines, detention and even imprisonment for those who break them.

SRI executive director Deirdre Fitzpatrick said the study aims to fill an important gap. 'For many people, maritime cabotage – or coasting, coastwise or coastal trade, as it is sometimes referred to – is understood only vaguely, if at all,' she pointed out.

'This is not surprising, as so little is published on the subject. This was a complex project, given language and cultural barriers, and difficulties in statutory interpretations. But the subject is important. It affects a very wide range of trades, services and activities around the world, with significant social and economic consequences. Policy-makers, especially, need to know more about the subject.'

Nautilus general secretary Mark Dickinson said: 'We warmly welcome this report, and believe the findings deserve serious attention by all governments and, in particular, other EU member states.'

'This thorough and groundbreaking research demonstrates not only the global scale of cabotage protection, but also the strength of the economic and political case for protecting domestic shipping services.'

'The reasons why more than 90 maritime nations maintain some form of maritime cabotage law are not hard to see. They are a bulwark against a free-for-all that opens up national services to lowest common denominator competition. They help to protect against an open-coast approach that undermines domestic employment and training, presents a threat to safety at sea, and attacks the principles of national wage rates.'

'Any maritime nation serious about its future must have policies in place that help to maintain a sustainable supply of domestic seafarers and a healthy national shipping industry,' Mr Dickinson noted. 'Cabotage protection helps to safeguard those precious resources by staving off damaging deregulation and guarding against the excesses of exploitation in the globalised shipping industry.'

'Our **Jobs, Skills and the Future** report highlighted the need for the UK – as an island nation with a huge reliance upon a strong and viable domestic shipping fleet – to adopt an ambitious policy programme that will give the country the shipping industry, and the seafaring workforce, it needs for the future. Cabotage will help to deliver that.'

David Heindel, chair of the ITF seafarers' section, commented: 'The lack of accurate facts on cabotage laws around the world has been an impediment for policy-makers considering implementing cabotage laws. This report represents a circuit breaker, providing policy-makers with the relevant facts for proper decision-making.'

'The SRI report debunks the myth that cabotage is an exception, not the rule,' he pointed out. 'We know there are a number of countries considering introducing, strengthening or diminishing cabotage regulation. This report will assure those governments that it makes sense to enforce national cabotage laws.'

James Given, chair of the ITF's cabotage task force, added: 'The benefits of cabotage laws are self-evident. For countries that depend on the sea for their trade, cabotage safeguards their strategic interests as maritime nations, bringing added economic value while also protecting national security and the environment.'

'Cabotage provides jobs for a country's seafarers and safeguards foreign seafarers against exploitation posed by the liberalisation in the global shipping industry, preventing a race to the bottom.'

'Without strong cabotage rules, local workers often have to compete with cheap, exploited foreign labour on flag of convenience vessels, the owners of which usually pay substandard wages and flout safety laws.'



The report **Cabotage Laws of the World** is available free of charge at [www.seafarersrights.org/research-projects](http://www.seafarersrights.org/research-projects) (click on Cabotage)



Captain Francesco Schettino is pictured onboard the wreck of Costa Concordia when he returned to the vessel with experts investigating the accident  
Image: Reuters

professional expertise.

‘The theoretical knowledge is valid to examine the failures after any occurrence that takes place and subsequently implementing the appropriate corrective actions,’ Capt Schettino argues. ‘It is not supposed to analyse the behaviour and conduct held by another person without having the prerequisites and the capability to place oneself in that particular situation.’

Capt Schettino says he believes his experiences as a seafarer have served as ‘a sort of preparation for withstanding the overwhelming memories of the accident and for accepting my life today’.

He says he feels ‘morally compelled’ to repeatedly analyse the accident and to offer insights that would prevent a similar accident in future. ‘Few captains lived a similar experience, and I sincerely wish that none will ever go through anything similar,’ he adds.

Capt Schettino says it was too simplistic to blame the Costa Concordia disaster on the ship’s deviation from the standard route. He says the accident, and others since, demonstrate the need for more attention to be paid to the way in which bridge teams interact, communicate and share information.

Meanwhile, a group of maritime professionals from across Europe are continuing to lobby to overturn Capt Schettino’s conviction, arguing that ‘the unbalanced criminalisation of the captain, alone judged to be solely responsible for the total operation of the ship, is undermining the basic intention of IMO’s ISM Code’.

In an open letter sent to the Italian maritime administration and Carnival Cruises president Arnold Donald, they warn that the way in which the case has been handled could adversely affect the recruitment and retention of seafarers, and damage the cruise shipping industry.

# SCAPEGOAT SCHETTINO?

The case of former Costa Concordia master Francesco Schettino, now behind bars in an Italian prison, is still not closed. As **ANDREW LININGTON** reports, a Norwegian safety expert is leading efforts to take an appeal to the European Court of Human Rights...

**T**wo years into his 16-year jail sentence, Francesco Schettino – the former master of the cruiseship Costa Concordia – has raised questions about the fairness of the trial that saw him convicted of multiple manslaughter, causing a maritime accident and abandoning ship before all passengers and crew had been evacuated.

In a letter written from prison in Rome, Capt Schettino points to the absence of maritime knowledge in the proceedings that led to his imprisonment, with the court lacking an understanding of the

principles of seamanship and of crucial factors that led to the accident in which 32 passengers and crew died in January 2012.

Relevant arguments were ‘neglected and misinterpreted’, he complains, as ‘nobody had nautical legacy and practical experience for understanding the various limitations aroused after the collision for handling the emergency on a mega-cruise ship’.

His letter questions whether the behaviour and conduct of someone can be properly judged unless there is adequate familiarity with their working environment and

The letter points out that charges against the cruise company and other members of the bridge team were dropped as a result of plea bargaining, leaving Capt Schettino as the only person taking the full legal consequences of the disaster.

‘We claim that the transfer of the operational responsibility from the company to the captain by plea bargains is a clear breach of the requirements of the ISM Code,’ it adds.

Those supporting Capt Schettino’s move to bring a further appeal to the European Court of Human Rights, after an appeal to the Italian Supreme Court to reopen the case was rejected, include former accident investigators, maritime education lecturers, safety experts, and a former shipping company superintendent.

Norwegian casualty investigator Arne Sagen said it was wrong that criminal action had been taken against Capt Schettino on the basis of an ‘inappropriate’ investigation by the Italian authorities which had failed to properly explain what had happened and why.

Mr Sagen said analysis showed the Italian investigation report was partly contradictory and ‘extremely inaccurate, incomplete and biased in disfavour of the captain’.

The treatment of the master had amounted to ‘a grave misconception of the ISM Code’, and failed to follow the Code’s intention of giving the ship operating company the overall responsibility for safety culture, routes and procedures, he added.

The investigation had also failed to adequately address issues around the use of electronic charts onboard Costa Concordia, and the ECDIS training given to the bridge team, Mr Sagen noted. He said a computer simulation of the accident had been

● ● ●  
**‘The way the Schettino case has been handled could adversely affect recruitment and retention of seafarers’**



The capsized Costa Concordia before salvage operations began



▲ Former accident investigator Arne Sagen is pictured with Jan Harsem from the Skagerrak Safety Foundation, delivering a letter to the Italian embassy in Oslo, seeking a pardon for Capt Schettino

developed, taking information from a range of sources including the voyage data recorder. As well as confirming that the Indonesian helmsman had incorrectly turned the ship to starboard after he misunderstood Capt Schettino’s order to turn hard port, Mr Sagen said the simulation had also raised questions about the final manoeuvring of the vessel.

The analysis of the Italian investigation report also questions its approach to evaluating the qualifications and training of all members of the bridge team and whether the company’s bridge team procedures were appropriate and ship-specific.

It argues that the investigation’s focus upon human errors was made without the necessary deeper systemic analysis of error-inducing workplace conditions and organisation.

It also points to shortcomings in the report’s consideration of factors

such as the status of watertight doors and the failure of life-saving appliances.

The way in which Capt Schettino has been singled out for blame raises the risk of other masters being criminalised after maritime accidents, Mr Sagen argues. His treatment by the police and other authorities – at a time when he was probably suffering from post-traumatic stress in the aftermath of the incident – failed to reflect the principles set down in an EU directive and international guidelines for fair treatment.

Mr Sagen said Italy’s practice of giving a criminal investigation precedence over statutory safety investigations was out of line with EU principles, and the ISM Code had not been properly implemented in the Italian judicial system.

In an article in Maritime Risk International last month, he also questioned whether cruise shipping was safer as a result of the Costa Concordia accident. ‘Did we really learn what we should and what we needed to gain most from this unfortunate event? The industry needs to examine the investigation into this incident and address the safety questions that are raised, to ensure the risk of a repeat tragedy is minimised.’ **t**





# PLASTIC POWER

It's estimated that around eight million tonnes of plastic waste ends up in our oceans each year. **MICHAEL HOWORTH** reports on plans for a special vessel that will help to clear it up...

**I**t looks a lot like a superyacht – and the self-powering, 70m, tri-deck cleanup vessel Ocean Saviour certainly aims to perform like a superhero.

The £40m vessel has not only been designed to pick up as much as five tonnes of plastic waste from the seas each day, but also to convert the debris into a synthetic gas that will provide its power.

This pioneering project is the brainchild of Richard Roberts and Simon White, founders of **TheYachtMarket.com** – an internet-based company, launched in 2003, with a database that lists boats for sale.

Compelled by the need to do something to tackle the extraordinary plight of our oceans, they began throwing around ideas with some of the world's top naval architects and yacht designers, in an attempt to look at new ways to bring together technologies to tackle the problem.

A few short months later, the Ocean Saviour project has started to take shape, and is working with several highly regarded organisations and notable figures from across the global marine industry.

The designers agreed that all technological advances in alternative energy technologies should

▲ An artist's impression of the planned plastic-fuelled vessel Ocean Saviour

be incorporated where possible, but not at the expense of the overall appeal of the design. It is planned that solar power panels and multiple, small wind generators will be incorporated into powering ancillary systems.

A large-scale catamaran was recommended by the design team as the most economical and stable option on the water. The open-plan lower deck will be one of the main working areas of the vessel and has been specially designed to allow ventilation, with hinged storm shutters offering protection against the weather.

This entire deck is dedicated to plastic removal and industrial-scale recycling. Mid-deck is home to two, 12m containers, which will offer research laboratory facilities or VIP accommodation options and bulk storage area, aft of the crew quarters.

Central to the vessel's design are Manta Collector Array collection systems at the side and front, which will be deployed to draw in plastics. These will then be fed into an onboard conveyor, chopped finely, milled, and processed through an onboard plasma gasification facility, which will destroy it with minimal atmospheric pollution. The product of this pioneering process will then be used to fuel the vessel, making it self-powering.

This compact waste-destruction process was first implemented for marine use onboard the aircraft carrier

USS Gerald R Ford, by advanced plasma-processing company PyroGenesis. The US Navy specified the system for the ship in order to have a highly compact means of destroying waste at sea, as an aircraft carrier can be out for many months without coming to port.

While the vessel's curved front windows echo superyacht design, their purpose is far more utilitarian, as they will lessen the impact of rogue waves, green water and windage, and will offer maximum visibility for the crew.

The wheelhouse is located on the third deck, which will also house the main crew areas and helipad.

A single Ocean Saviour vessel aims to clear five tonnes of plastic per day, so one vessel would take 40 years to clean up the Pacific garbage patch using plasma technology. This could obviously be scaled up if there was more than one vessel in operation.

Announcing the initiative at the Southampton Boat Show, Mr Roberts said: 'This is very much phase one of the project and I look forward to working closely with our partners on its development.'

'Our oceans are a vital resource, and it is essential we all do what we can to preserve them for future generations. I'm especially pleased to work with such a talented group of individuals to help make this a reality.'

'It's staggering to think that there are currently more than five trillion pieces of plastic in the ocean, which is having a hugely detrimental impact on our ecosystem and the ocean's biodiversity,' he added. 'It's essential that we remove plastic before it breaks down into microplastics – and, through Ocean Saviour, we aim to help eradicate the ocean of this problem.'

Concept designer Ricky Smith added: 'Ocean Saviour proposes an environmental revolution whereby we, as a community, undertake the immense and urgent task of physically collecting the plastics from the oceans and waterways.'

'The Ocean Saviour project is vast and will require input on many levels. This is a crusade for the liberation of our oceans from the waste created by both our brilliant technology and our disregard of the oceans.'

Dr Jan Feiwald, executive director of the Reef Check Foundation, commented: 'Ocean Saviour's project to remove plastic from our oceans should be applauded. As Reef Check monitors ocean health around the world, and sees the impacts of pollution first hand, we support their ambitious approach to solving this problem.'

Round-the-world sailor Dee Caffari said: 'I have seen the sad reality of our ocean's health. Now, having been part of the team collecting micro-plastic data for the first time around the world, we know the issue is much worse than we all initially thought.'

'While we still have to address the problem of single-use plastic debris getting into our oceans in the first place, Ocean Saviour would tackle the issue of clearing it from our oceans. We need innovation and new technologies like this to make change happen.' **i**



The Maersk Launcher towing the Ocean Cleanup boom out to the Pacific from San Francisco

## BOOM TIME

While plans for the Ocean Saviour vessel are still at the design stage, an earlier project to clean up the Great Pacific Garbage Patch is very much up and running.

The Ocean Cleanup – featured in the March 2018 Telegraph – aims to collect floating plastic waste by trapping it in a 'skirt' under a 600m-long weighted boom.

The boom system was designed and built in the Netherlands, and tested in the North Sea with the help of Nautilus members at Boskalis. It was then taken to San Francisco for further work and assembly on the Pacific coast.

On 8 September this year, the system was launched in San Francisco Bay and towed to a location 240nm offshore by the Maersk Launcher, which has been made available to the project by A.P. Møller-Maersk and DeepGreen, its current charter holder.

After a two-week trial at the first location (pictured below), the boom system continued its journey toward the Great Pacific Garbage Patch, 1,200nm miles offshore, to start the cleanup. The floating garbage trapped by the system will now be periodically scooped onboard collection vessels and taken ashore for responsible processing.

### PACIFIC TRIALS CHECKLIST

SEPTEMBER 15 - 29<sup>th</sup>, 2018

- U-SHAPE INSTALLATION
- SUFFICIENT SPEED THROUGH WATER
- ABILITY TO REORIENT WHEN WIND/WAVE DIRECTION CHANGES
- EFFECTIVE SPAN IN STEADY STATE
- NO SIGNIFICANT DAMAGE BY END OF TEST







# AUTONOMOUS THINKING

With automation very much the hot topic in shipping, there was an opportunity at the IMO last month for maritime professionals from across the globe to quiz the hi-tech engineering companies leading the revolution. SARAH ROBINSON reports...

**T**he International Maritime Organisation's Maritime Safety Committee (MSC) has a proud record of developing and implementing the international regulations that help keep seafarers safe – from the COLREGs to shipbuilding standards. The Committee recently saw its 100th session, and to mark the occasion, a special event was held at IMO headquarters in London on 3 December 2018.

Although the event started with a look back at MSC achievements, the main focus was on the future, with three speakers invited to give presentations on automation and its implications: Kevin Daffey of Rolls-Royce, Branko Berlan of the International Transport Workers' Federation (ITF) and Timo Koponen of Wärtsilä.

The day of the MSC event had been a highly significant one for Rolls-Royce, noted Mr Daffey. In Finland, just a few hours earlier, the company had successfully carried out a voyage demonstrating Svan, its new remote-controlled and autonomous ferry navigation system – claimed to be the first of its kind. The voyage had been made possible, Mr Daffey pointed out, by the Finnish government passing legislation to regulate the use of autonomous vessels in the country's domestic waters.

IMO secretary-general Kitack Lim opened the MSC 100 event in front of a packed house of delegates from all over the world. Panel members to his left included Kevin Daffey of Rolls-Royce, Branko Berlan of the ITF and Timo Koponen of Wärtsilä. Image: IMO

The only other country to have developed such regulations is Norway, and in his presentation, Mr Koponen spoke of Wärtsilä's own work to trial an autonomous vessel in Norwegian waters. We should no longer talk about automation happening in the future, added Mr Daffey: 'The technology is here!'

But how should the global shipping industry deal with these developments, and what will the impact be on seafarers? With delegates present from IMO member nations worldwide, the MSC event allowed some very knowledgeable and experienced maritime professionals to challenge the speakers in the panel on their claims and predictions.

Branko Berlan was first to raise a note of caution about the new world of autonomous shipping, using his presentation to point out that, when it comes to maritime safety, technology is not necessarily better than human decision-making. 'It's a misconception that accidents are primarily caused by seafarer error,' he said. In fact, he claimed, trained maritime professionals onboard ships are much more likely to avert accidents than cause them, and they often step in to solve problems caused by faulty technology. Seafarers will remain indispensable, he stressed.

Mr Koponen said that the main thrust of Wärtsilä's development work was to use 'augmented reality' to

enhance seafarers' abilities rather than replace humans. In his presentation, he demonstrated different viewing modes for a device that could allow navigators to see the view from the bridge with information about surrounding vessels and potential hazards superimposed onto these objects in real time.

Another point about the role of seafarers in autonomous shipping was later raised in a question from the floor. Kevin Daffey had spoken of new job opportunities for seafarers in shore-based remote operation centres – which could be attractive for being more family-friendly than going away to sea. However, one delegate asked how officers could rise through the ranks and be trained to become shipmasters capable of remote operation if they no longer went to sea in significant numbers. The panel agreed that it was very important for the IMO to consider this issue in the next few years, and Mr Daffey conceded that there were some vessels which may never be suitable for unmanned voyages, such as those carrying dangerous cargoes.

Regarding the regulatory framework for autonomous and remotely-operated vessels, there was consensus in the room that international standards and regulations would be very challenging to develop. Mr Daffey said that this work could take the IMO as long as 10 years, and he urged individual flag states to follow Finland and Norway's lead in developing national legislation so they could benefit from the new technology more quickly in their own waters.

Mr Berlan added that, from the seafarer's perspective, the biggest regulatory issue was assigning the share of responsibility and liability between ship and shore. 'There is lots of legal work to be done on this,' he stressed. He also stated that, in his



Image: Rolls-Royce

As reported at the MSC 100 event, Rolls-Royce and the Finnish state-owned ferry operator Finferries staged a 'ground-breaking' demonstration last month of what is claimed to be the world's first fully autonomous ferry. The 54m car ferry Falco completed a return journey between Parainen and Nauvo under fully autonomous control. The vessel detected objects utilising sensor fusion and artificial intelligence and conducted collision avoidance. It berthed automatically, using a recently developed autonomous navigation system, with all operations monitored at a shore-based remote operating centre, some 50km, away in Turku city centre.

● ● ●  
**'International regulations could take as long as 10 years to develop, and there are some vessels which may never be suitable for unmanned voyages'**

view, fully autonomous vessels should never be permitted to operate internationally.

On the technological side, one questioner raised a point that must have occurred to many in the room: what happens if an autonomous or remotely-operated vessel loses contact with the shore? Mr Daffey said that this issue had been paramount at Rolls-Royce from the start, and that the company's vessels were designed to enter a special safe mode if they lost contact.

Both Mr Daffey and Mr Koponen added that, in an effort to maintain contact at all times, their companies were using several communication methods in conjunction, including satellite communications, 4G mobile phone signals and radar. Communications with their vessels are encrypted to protect against cyber-attacks, they noted.

Standard-setting for construction was another point of discussion. Mr Daffey and Mr Koponen had advocated the development of goal-based standards for the build and operation of autonomous and remotely-operated vessels, but a delegate asked whether prescriptive standards would not be better for safety. In response, Mr Daffey spoke strongly in favour of goal-based standards, saying that technical innovations were progressing so quickly that prescriptive standards would not be able to keep up.

In other words, he explained, manufacturers should be given a safety outcome that the regulators wanted them to achieve, and they should be free to use their latest technology to do this. If the standards prescribed the use of a particular device or method, he pointed out, this could quickly become obsolete.

One further issue raised was the role of autonomous and remotely-operated vessels in lifesaving and search-and-rescue. Mr Daffey speculated that such vessels could perhaps be deployed to the scene of an accident and be directed remotely to lower liferafts, but acknowledged that there was a great deal of technical and regulatory work needed on this. In addition, the panel members agreed that the international obligation for all vessels to go to the aid of others in distress would need to be revisited. 📌

To watch a video about Rolls-Royce's Svan system – including the voyage on 3 December 2018 – go to [www.youtube.com](http://www.youtube.com) and search for **Svan demonstration Rolls-Royce**.



# DON'T PANIC

There has been much speculation about the future role of seafarers in the brave new world of autonomous shipping. But a new study suggests there's no need for alarm. **GARY CROSSING** reports...

**D**oes automation threaten your job? Earlier this year, a Nautilus Federation survey found that 84% of maritime professionals believe that it does. However, a new report questions whether seafarers should be worried.

The research was produced by the Hamburg School of Business Administration for the International Chamber of Shipping (ICS) with the aim of seeking to 'separate fact from fiction'.

The report – **Seafarers and Digital Disruption** – examines the potential effects of the increased autonomy of ships, the digitisation and digitalisation of vessel systems, and the digital transformation of ship operations.

Its key finding is that even if as many as 3,000 autonomous or semi-autonomous ships are introduced by 2025, there will be 'no shortage of jobs for seafarers in the foreseeable future'.

Rather, it argues, those jobs may alter. For while the increase in autonomous shipping may possibly reduce global demand for seafarers by between 30,000 and 50,000, at the same time it

will increase the need for highly skilled remote-operators on shore, pilots of a new kind and riding gangs to keep high-tech ships operational.

The report paints a particularly positive picture for officers, claiming that they have 'no reason to worry about job security'. It contends that the predicted growth in the world merchant fleet over the next 10 years will continue the trend of a growing gap between officer demand and supply – with a forecast deficit of 147,500 officers by 2025, despite improved recruitment and training levels and reductions in officer wastage rates over the past five years.

So, while the digitalisation of ships may mean that the number of crew onboard a vessel falls, the increase in the world fleet will mean the need for officers will remain about the same. 'At the

same time the number of "crew" on shore in supporting functions will increase, possibly significantly,' the report says.

'This leaves valuable time to adapt training patterns and re-train experienced seafarers with digital competencies,' it adds.

However, the researchers raised a number of important 'human element' questions for the industry to answer, noting how the traditional roles of personnel onboard and ashore will need to be redefined.

Owners and operators will need to determine what work needs to be done onboard and what work can be done remotely, identify which jobs will then become available and which qualifications will be needed.

'They will have to redefine roles, communicate, train and re-train their employees,' the study says. 'They will also have to

● ● ●

**'There is time to adapt training patterns and re-train experienced seafarers with digital competencies'**

carefully compare the commercial viability of technically disruptive projects.'

The industry also needs to determine how staff can be trained to obtain new skills and how existing skills can be passed on to a new generation in future – with a big question about whether compulsory sea time will remain relevant.

Thought must also be given to the repercussions for industrial relations and collective bargaining agreements, the researchers warned. Decisions may have to be made on whether pay scales and pay logic need to be redefined.

The report says the legal repercussions of autonomous shipping also need careful consideration. 'Regulators need to define equivalency between human-driven action and machine-driven action,' it says. 'Particular thought needs to be given to essential notions like the "seafarer" if borders between shore-driven and board-driven vessels blur.'

The report cites the 2018 investigation by the Comité International Maritime (CMI) into the current regulatory environment for unmanned autonomous ships. The CMI asks several fundamental questions about 'what constitutes a ship, the possibility of a master who is not



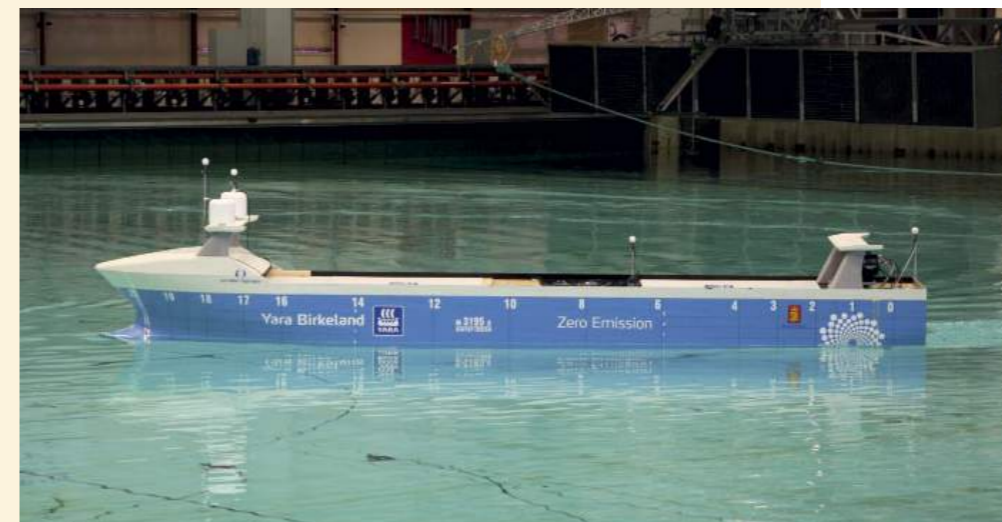
onboard, and the constitution of the crew'.

The whole concept of 'manning' is challenged by automation, the report notes, and there are significant consequences for the responsibilities of a master and the way that ships are regulated and insured.

Researchers also highlighted the need for attention to be paid to the future physical and mental welfare of seafarers. 'There are concerns that as the number of people onboard a vessel decreases, their functions are taken by machines and the physical demands decrease, mental demands will increase. This will result in less social interaction between those remaining, leading to issues like loneliness and potentially depression,' the report warns.

▲ Research commissioned by the International Chamber of Shipping predicts that shore-based centres will increasingly take over routine operations of ships

▼ Model tests of the Yara Birkeland, which is set to be the world's first autonomous, zero-emissions shortsea cargo vessel and is due to come into service early in 2020



Noting the potential for minimum safe manning levels to be affected by automation, the report reassures that 'any adaptation of manning levels would be carefully filtered through international bodies and closely monitored by a variety of stakeholders. Work and rest hours would continue to be ruled by MLC, 2006, national legislation and collective bargaining agreements'.

The researchers also reflected on the concerns of seafarers from developing countries, who may find it difficult to get work ashore in their home countries should their jobs disappear with automation.

The report says many ratings join the maritime industry 'following in the footsteps of their parents and grandparents, and are therefore concerned that this career path may not become available for their offspring in the future.'

'It is extremely important to reassure them that there will still be work available onboard which their future family members can apply for,' it adds, 'but they need to be mindful that the type of work available may differ from that which they do today.'

In conclusion, the report says that 'digital transformation will be a seamless process rather than a disruptive one', and that there will not be a lack of work for seafarers in the foreseeable future – with considerable additional jobs ashore and significant training needs.

ICS secretary general Guy Platten commented: 'Encouragingly, the study indicates that there will be no shortage of jobs for seafarers, especially officers, in the next two decades. While the size of crews may evolve in response to technological changes onboard, there may also be considerable additional jobs ashore which require seafaring experience.' **t**



# NOT FIT FOR PURPOSE



Simulator training at City of Glasgow College. The IMO is being urged to ensure that the STCW Convention reflects advances in training and technology, such as the increased use of simulators

Why are so many seafarers finding that their hard-won STCW certification isn't enough to get a job? If employers are having to carry out extra checks or run additional courses, then there's something wrong with the global training requirements, an international conference heard last month...

**N**autilus has backed a warning from the head of the International Chamber of Shipping (ICS) that the global rules governing seafarer training and certification need to be radically overhauled.

Speaking at the CrewConnect Global conference in Manila, ICS chairman Esben Poulsen said it was time for the International Maritime Organisation (IMO) to kick off a comprehensive review of the STCW Convention.

Mr Poulsen said the fact that many shipping companies are providing additional training and requiring supplementary checks before crew are deployed suggests the convention is currently failing to deliver the competent seafarers

the industry requires – and, in its current form, is highly unlikely to deliver them in the future.

The Convention was first adopted in 1978 and revised in 1995 and 2010, when the 'Manila amendments' introduced new requirements including electro-technical officer certification, security, safety and leadership and management training, and high voltage and ECDIS courses.

However, Mr Poulsen questioned whether the most recent review had been sufficiently comprehensive. 'The 2010 amendments may have only been an interim revision, adding new training and certification requirements without removing outdated requirements or making structural framework

changes to accommodate new elements,' he argued. 'This has resulted in STCW becoming top-heavy and cumbersome.'

The ICS chairman pointed out that the diplomatic conference which adopted the 2010 amendments had passed a resolution calling for comprehensive revision of the STCW Convention every 10 years – but there is at present no sign of anything being done to start this process.

He noted that the 2010 amendments had created significant challenges, with some countries struggling to update their national legislation, approve new courses, put seafarers through new courses and process new and revalidated certificates in time.

Against this background, he said the lack of movement to revise the convention is not surprising – especially as regulatory efforts at the IMO are concentrating on environmental issues. 'Safety matters, to which seafarer training standards are central, are not receiving the priority deserved,' he stressed.

Mr Poulsen said it was vital that the convention is updated in a way that

secures its relevance and future. 'Global supply of quality seafarers, and their availability to the world merchant fleet, depend on it,' he warned. 'Regional requirements constantly threaten global standards. Shipping companies and seafarers cannot afford for this threat to be realised.'

Owners also want to head off the recent trend for some new training programmes to be driven by manufacturers and maritime training institutions, the ICS chairman said.

He argued that the STCW regime must be revised in a way that ensures it keeps up with the rapid pace of technological developments, including increased automation of ship systems, equipment and operations. 'It should provide a structure of sufficient flexibility and adaptability to "hit the moving target" of a changing world fleet, and may need to develop a more modular approach to training and competency accumulation and certification,' he continued.

'We can certainly anticipate increased authority for decision-making by systems

and equipment, with complementary changes in the purpose and frequency of human interventions required,' Mr Poulsen added. 'This will inevitably change the functions seafarers perform onboard ships, and the required skills and training.'

The owners also want to see better processes for enforcing STCW requirements around the world. Mr Poulsen said the 'so-called STCW whitelist' of nations that have given the IMO evidence of compliance 'now serves very little real purpose as it includes everyone, and no one is deleted.'


He added: 'ICS would not wish to tear up the whitelist without a suitable replacement, but there has to be a more transparent and robust monitoring system of national implementation to ensure that STCW continues to deliver competent and quality seafarers.'

Mr Poulsen said the owners appreciate union concerns over the potential impact of automation on seafaring jobs. But, he added, 'we challenge any perception that shipping will no longer need to recruit and retain skilled and capable persons – in fact, we think the truth is quite the contrary.'

'The jobs market looks bright, but training is crucial,' he argued. 'Roles onboard and ashore will evolve operationally and legally, as will the skills required. Reviewing and understanding change is essential whenever technology is introduced, altering how we work. The result needs to improve upon today, not step backwards.'

Nautilus professional and technical officer David Appleton commented: 'Nautilus agrees with the comments of Mr Poulsen regarding the STCW Convention and the IMO whitelist. Whilst the industry is getting carried away with talk of the imminent arrival of autonomous or semi-autonomous ships, recommendations from accident reports show that shipping has not yet got to grips with training people properly on how to use equipment that has been around for over 20 years.'

'Mandatory training requirements introduced since the last major revision have tended to be reactive, and invariably place the onus on the seafarer to obtain a certificate to allow them to continue their employment,' he added. 'What the industry needs is not only a complete overhaul of the syllabi to ensure that they remain relevant to modern shipping, but also a mechanism to allow colleges to update their training programmes in response to industry developments without having to wait for amendments through the bureaucratic IMO committee structure.'

'If these changes were implemented in conjunction with a system that not only monitors apparent minimum compliance with the convention – as is currently the case with the whitelist – but also recognises those administrations that offer higher quality training, then we could ensure the supply of competent seafarers for the future and that quality standards are constantly driven upwards.' 



International Chamber of Shipping chairman Esben Poulsen addresses the CrewConnect conference





# CONNECTING TO CARE

Could digital technology be used to deliver better health and safety for seafarers? That's the question being examined in a major EU-funded project which seeks to improve at-sea healthcare. **ANDREW LININGTON** reports...

**G**ood progress has been reported on the four-year e-healthy ship project, which was launched in 2017 to develop innovative technologies for helping seafarers get quick and easy access to vital information about health and medical issues.

The ultimate goal of the €1.86m initiative is to develop an onboard electronic platform – centrally accessible through PCs, tablets and phones – to enable seafarers to get advice and support with such things as emergency care, medical treatment, vaccinations, hygiene, training and nutrition.

It is hoped the platform could

▲ e-healthy ship researchers are pictured above preparing to start their shipboard studies

cut paperwork and simplify onboard documentation requirements, as well as helping to open up telemedicine capabilities.

The initiative is supported by the European Regional Development Fund (ERDF) and the funding programme of the Hamburg Ministry of Health and Consumer Protection, and is being carried out by a team of occupational and shipping medical experts, software developers and shipping companies.

In the first phase of the project, researchers carried out shipboard studies onboard two containerships and a bulk carrier, assessing seafarers' needs and

examining their health, nutrition and fitness levels. The work has involved the collection of such data as heart rates, blood and skin condition, UV exposure, the use of 3D technology to track activity and movement patterns during work and leisure periods, the monitoring of daily food intake, and sleep duration and quality.

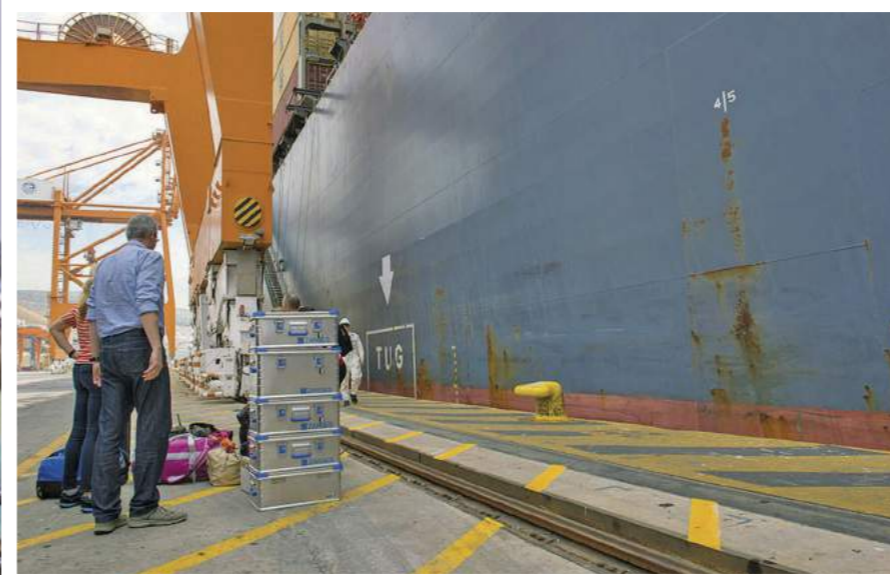
Crews are being asked to complete anonymous questionnaires about well-being and mental health. The results should show the levels of knowledge about health topics among different cultural groups onboard, enabling scientists to develop targeted health-related

promotional materials and to determine which modules will be most relevant on the IT platform.

The project has a major focus on stress and fitness, and one of its core aims is to provide seafarers with training and support to cope with the intense demands of their work, as well as addressing the impact of factors such as noise, vibration, and separation from family and friends.

Researchers say they want the project to empower seafarers – giving them greater control over shipboard health, reducing the administrative burden and offering e-learning opportunities – and they are planning to produce a range of training materials designed to motivate seafarers to develop a greater awareness of nutrition, exercise and ergonomics.

PD Dr (Med) Marcus Oldenburg, from the Institute for Occupational and Maritime Medicine (ZfAM), is one of four researchers visiting the three ships taking part in the project, and he underlined the importance of improving seafarers' health. 'There are long and hard-working days and exhausting night shifts,' he pointed out. 'Often the work has to be done under time pressure due to port stays, tides and loading.'



▲ The e-healthy ship project has included studies on containerships and bulk carriers

▼ Motion tracking a seafarer at work to investigate their activity levels while at sea



Dr Dorothee Dengler, also from ZfAM, added: 'Long absences from home and limited communication opportunities, among other things, make it difficult for seafarers to achieve a healthy work-life balance. Behavioural prevention, such as stress management, relaxation and sleep competence, strengthens seafarers in this situation and increases their resilience.'

The researchers recognise the challenges posed by shipboard connectivity limitations, and another core aim is to produce technical and content-related design specifications that will ensure the onboard platform can prove functional and reliable in a variety of circumstances. Experts are looking into the idea of developing the system in a modular way, so shipping companies can adapt it to their specific needs and technical requirements.

The idea of using short standardised protocols for telemedicine communications between ship and shore is also being explored, and a later stage of the project will involve testing the e-health platform on four selected ships. The project team want to see how the platform will be used over a 10-month period by masters and officers and to identify any elements that need to be modified.

As well as ZfAM, partners in the project include the shipping companies Peter Döhle and


Reederei Roth, and software developer Hanseaticsoft.

'The system will be available as a cloud and web-based solution that can be accessed any time and from any device, as well as an offline application installed onboard vessels. This way, seafarers always have all information at hand, even if there is no internet connection available,' Hanseaticsoft CEO Alexander Buchmann pointed out. 'We can incorporate a lot of the experiences we gathered while developing our own cloud-based system to create a system that is easy to use without any time-consuming training.'

He said the project will establish a 'central pool' for seafarers to manage illnesses onboard, as well as administering medications. Crew members will be able to access the platform independently, enter cases of illness, look up appropriate medicine, and manage stock in the ship's medicine chest.

Dr Oldenburg said the researchers recognised that it would be a big challenge is to gain the attention, interest and trust of the crews – but they have been delighted that participation rates have been as high as 95%.

'It is emphasised that every part of our research is entirely voluntary, and all collected data is treated absolutely confidentially,' he added.

'However, after finishing the third examination aboard I can conclude that the crews of the three test vessels cooperated extremely well, offered us deep insights into their daily life, supported our work and tried to make our stay onboard as comfortable as possible.' 

For more on the e-healthy ship project, visit [www.e-healthy-ship.eu](http://www.e-healthy-ship.eu) (website available in German and English versions)





Nautilus has helped to develop a free training package to help seafarers cope with the mental health and wellbeing challenges of shipboard life. **SANDRA SPEARES** heard at the October launch event why this is considered so important...

**A**ttitudes to mental health have come a long way in recent years, and seafarers' welfare has been pushed up the agenda – but more needs to be done, experts have cautioned.

The warning came at the International Shipowning & Shipmanagement Summit in London as KVH Videotel launched its new training package **Seafarers' Mental Health and Wellbeing**, which has been produced in collaboration with a number of industry organisations, including Nautilus.

Available free of charge, the package includes a short video, facilitator notes and information booklets, and gives advice on such things as rest, diet, team activities,

and maintaining good relationships. It also offers guidance on sources of support, such as the 24/7 multilingual helpline and chat service at [www.seafarerhelp.org](http://www.seafarerhelp.org) and the port-based seafarers' centres run by maritime welfare charities such as the Mission to Seafarers and Apostleship of the Sea.

At the launch event, KVH senior vice president Mark Woodhead said the subject of mental health was close to his heart because of a personal childhood experience. The initiative had attracted strong support from throughout the industry, he added, and reflected the fact that 'seafarers face unique working conditions which can put them under tremendous stress, with fewer opportunities for relief

than they would be likely to find on land'.

The director of the video in the package, Keith Purkis, said the programme did something that had not been done before: giving seafarers a voice and the opportunity to discuss mental health issues and how to cope with being at sea.

'Seafarers tend to know how tough their lot is; they don't necessarily need to be reminded of it,' he pointed out. What was important with this project, he stressed, was that seafarers were actually talking to seafarers.

So why is this topic being discussed now? Caitlin Vaughan of the International Seafarers' Welfare Assistance Network (ISWAN) said there is a lot more discussion in

wider society about mental health issues. As a result, ISWAN started looking at the issues more closely, honing its 24-hour hotline services for seafarers experiencing mental health issues and updating the advice it gives out.

Colin Payne, who recently retired as HR director of Swire Pacific Offshore, said P&I clubs have produced evidence to show the cost of accidents and incidents arising from mental health problems. He also highlighted the impact of changes in crewing policies, with seafarers now serving on ships with up to 20 different nationalities, meaning the 'little village' onboard has gone. His company had tried to stop having 'the United Nations' on every ship, to try and get the community spirit going again.

Mats Sjöstrand, a chief officer at K.Line, said one approach might be to ensure that if there were mixed crews, one nationality was not in an overwhelming majority. Another issue to be considered is that suicide rates among men have generally increased a great deal. Men are not so good at expressing their feelings and are more prone to experience problems, he noted. 'The macho culture is still there in a way.'

Charles Boyle, director of Nautilus legal services, said there are statistics which suggest seafarers suffer higher than average suicide rates. The Union had supported research which showed the impact of issues such as fatigue, social isolation, not being paid on time, and family problems. Crew members will now often spend more time on the internet than socialising onboard with colleagues, he added.

Mr Boyle explained that while the Maritime Labour Convention contains a fair amount of content relating to seafarers' physical health and wellbeing, mental health issues were not covered at present. The Convention is due to be further amended, he pointed out, and its

scope could be expanded to incorporate mental health, along with bullying and harassment.

Ms Vaughan confirmed that ISWAN has been dealing with an increase in 'emotional support calls'. These particularly came from cadets who were unprepared for life at sea or found that it was not what they expected.

Mr Payne added that there was a danger of turning seafarers into victims, when they were not. They do work in a tough environment, he agreed, and there is a lot more that could be done including measuring resilience, coaching and preparing the person to thrive in the environment. It would be easy, he suggested, to engage with colleges in this respect.



KVH senior vice president Mark Woodhead

The KVH Videotel training package **Seafarers' Health and Wellbeing** was launched at a London event in October

One of the interviewees for the film was a cadet who talked about his experience off-camera. His initial seagoing experience had been on a training ship, but then he found himself on a chemical tanker with a crew that were a different nationality. Mr Purkis explained that the cadet had found the reality of seafaring life to be a shock, and he had relied on his external community through his social media connections, keeping in touch with classmates who got him through the experience.

Mr Sjöstrand said a happy ship is one where the basics have been got right, including salaries being paid on time, good food, decent cabins, and a gym as well as the internet. That said, a crew member could have all those things, but with colleagues or a captain not behaving properly, or showing poor leadership, the crew member would be depressed anyway.

The overall message from the launch event remains that talking is key to solving the problem. **i**

For further information, and to obtain **Seafarers' Mental Health and Wellbeing**, visit [www.videotel.com/seafarerwellbeing](http://www.videotel.com/seafarerwellbeing)







# TROUBLE IN PARADISE

Superyacht crews have often been seen as a breed apart from their commercial shipping counterparts, enjoying glamorous lifestyles where the sun always shines. However, as **ANDREW LININGTON** heard last month, some familiar problems emerge when you ask the right questions...

**N**autilus has backed a new research report which recommends wide-ranging action to improve the standards of welfare support for seafarers serving in the superyacht sector.

International organiser Danny McGowan was part of an expert industry panel at the December 2018

launch of the report, which has been published by the International Seafarers' Welfare & Assistance Network (ISWAN).

The study draws on survey responses from more than 400 superyacht masters, officers and crew. Key findings in the 44-page report include:

- 45% of respondents said they had suffered from social isolation sometimes, often or always
- 80% of females and 54% of males reported suffering from one or more episodes of work-related stress
- 53% of females and 30% of males had experienced bullying, harassment or discrimination sometimes, often or always
- 82% had experienced low crew morale sometimes, often or always
- almost half said they had religious or spiritual needs which are not always met at sea or in port
- 55% of respondents were aware of illegal drug use among crew

Members of the industry panel at the launch of the ISWAN report into superyacht crew welfare. L-R: Karen Passman, Peter Dudzinski, Nicola Morgan, Danny McGowan, and Richard Le Quesne

The report recommends a range of measures to improve support for superyacht crews, including raising awareness of the help that organisations such as ISWAN and Nautilus can offer, looking at the potential to create shore-based social and recreational centres for crew, enhancing onboard space and facilities, improving rotation patterns and increasing opportunities for rest and relaxation.

It also points to the need to provide new recruits with better knowledge about what to expect in the job and calls for a review of grievance procedures 'to offer an alternative model not dependent on chain of command'. The report also suggests that there is scope for owners and management companies to contribute to the funding of organisations providing welfare support.

ISWAN executive director Roger Harris said the research had been commissioned in response to concerns about the welfare of crew. 'We have been getting an increasing number of calls from superyacht seafarers,' he added. 'Although the numbers are not big, the trend is upwards, and we wanted to better understand the needs of crews.'

MHG Insurance Brokers CEO Andrew Dudzinski said his company had worked with ISWAN on the research after noticing an increase in traumatic accidents and suicides involving crew. 'The industry is rooted in the stone age

and it is quite difficult to get it to buy into the concept of spending money on the crew,' he added. 'However, the welfare of crew is much more of an issue now and people are paying more attention to the crew as an asset, rather than just something you have to have onboard.'

Report author Dr Olivia Swift told the launch event: 'For many people, work on superyachts is a dream job and everything they could hope for. We are not here to dispute that, but there is a murkier side to the industry that needs to be looked at.'

Dr Swift said the report aims to fill a gap in knowledge about the needs of superyacht seafarers and identify the most effective measures to support them. Compared with other maritime professionals, the welfare of superyacht seafarers has received scant attention, she noted, but many crew experience similar issues to the commercial sector – such as long hours, stress, social isolation, and job insecurity.

Tackling some of the challenges identified by the report would help with recruitment and retention, as well as improving mental and physical health, morale and wellbeing, she added.

Mr McGowan welcomed the research results and said the Union will seek to ensure that there is action on the recommendations. Nautilus wants to see a successful and sustainable superyacht industry, he added, and it works closely with sector partners to address issues such as safety, welfare and professionalism – but the sector needs to devote some of its substantial resources to supporting the welfare needs of crew.

'The industry will struggle as long as some unscrupulous owners and managers see crew as expendable and a readily replaceable source of labour for their vessels,' he pointed out.


Nicola Morgan, from wilsonhalligan, said recent research from the Professional Yachting Association had shown the scale of sexual harassment problems, and there is a need to have someone onboard who is available to discuss problems with on a confidential basis. 'This is a wonderful industry, but like any other one there is room to improve,' she added. 'There are issues to deal with, but I think we are on the right track.'

Peter Dudzinski, from MHG Insurance Brokers, said insurance claims show evidence of mental health problems among crew, and he suggested there should be mechanisms in place to help seafarers before conditions deteriorate. 'A lot of female crew in particular are being signed off with no real prospect of coming back,' he added. 'Sometimes, crew are fearful at the end of their career in the sector and they don't know where to go next.'

Impact Crew founder Karen Passman said research had shown the importance of onboard culture and leadership development – with 64% of junior crew moving on as a direct result of their experiences of leadership. 'All too often, they will end up leaving the industry prematurely due to the working environment they find themselves in,' she added.

Mission to Seafarers secretary general Revd Andrew Wright said his charity is keen to get involved in the superyacht sector. He has personal connections with the industry, as his daughter has served as a stewardess for more than a decade – but he admitted that superyachts have 'slipped under the radar' of traditional maritime welfare agencies.

Mr Wright said he was concerned that some crew considered that they had to keep their religious beliefs a secret, and said it was disturbing that many are presently unable to access shore-based seafarer centres that could offer a quiet space for reflection or provide spiritual support.

He said the Mission has a number of ideas for supporting superyacht crews – including the potential for providing facilities in major yachting ports and undertaking vessel visits. 

Findings from the 2018 ISWAN welfare survey of superyacht crew

**75%** of respondents often or always work more than their **contracted hours**



**45%** said they sometimes, always or often suffer from **social isolation or loneliness**



**82%** had experienced **low crew morale** sometimes, often or always



**79%** of respondents were on **permanent contracts**



**74%** wanted more reliable **internet connection** onboard





# SLOW BUT STEADY PROGRESS

Academics at the Seafarers International Research Centre have just finished crunching the numbers on their latest cargoship crew welfare survey, and their comparisons between onboard conditions in 2011 and 2016 make for interesting reading. **ANDREW LININGTON** reports...

**L**iving and working conditions for many of the world's seafarers remain 'challenging', and the industry needs to do much more to improve key elements of life at sea if it is serious about tackling concerns over the mental health of crew, a new study has warned.

Some 75% of seafarers still serve on temporary contracts that cause financial instability, almost half have no pension contributions from their employers, and one in 10 say they are never able to go ashore, the research shows.

On the plus side, researchers found that average tours of duty have fallen significantly over the period, daily working hours have declined and overall levels of internet access have increased.

Produced by the Seafarers International Research Centre at Cardiff University, the report is based on feedback from two surveys of more than 1,500 seafarers carried out in 2011 and 2016.

Only one-quarter of seafarers said they were employed on a permanent basis – and British seafarers were the only national

group where the majority had permanent contracts.

In 2011, 55% of seafarers said they worked tours of duty of six months or longer – but in 2016 the proportion had fallen to just 34%. However, Chinese seafarers reported an increase in their tour lengths – with almost two-thirds working for six months or more at a time.

The study also found that seafarers got more leave in 2016 than they did five years earlier – with the average rising from 75.68 days a year to 86.29 days a year.

Around 47% of seafarers said their company did not pay pension contributions, 40% said the company did pay and 13% had no idea what their employer did about pensions.

The study found a decline in trade union membership levels among seafarers – from 40% in

**'Contracts and communications have improved, but living conditions are much the same'**

2011 to 34% in 2016, and with a particularly marked fall among younger officers.

Seafarers reported a fall in the mean number of hours worked while in port – from 10.276 in 2011 to 9.755 in 2016. Average daily hours worked at sea also reduced, from 9.483 in 2011 to 9.164 in 2016. Almost three-quarters of seafarers still work seven days a week.

The proportion of seafarers sharing cabins dropped from 14% to 10% over the five-year period and those with no access to private bathroom facilities onboard reduced from 24% to 21% in the same timescale.

Researchers said there had been little change in levels of satisfaction with cabin sizes, with just over one-quarter of crews saying they were not happy – and those serving on vessels built in South Korea significantly happier with cabin size than those on Japanese or Chinese-built ships.

In 2016, almost two-thirds of seafarers said they could control the temperature within their cabins, 57% said they could control electric light levels and 90% had access to natural light in their cabin. 'Natural light and a window

is important to human health and wellbeing,' the report notes, 'and for one in 10 seafarers to lack access to natural light in their cabins is disturbing, particularly given that engineers and engine ratings spend most of their working time inside spaces that do not have access to natural light.'

Some 60% of seafarers say they are disturbed by noise in their cabins for some or all of the time – with the rates rising to 72% on the smallest ships and 73% on Chinese-built vessels.

The proportion complaining of being disturbed by vibration in their cabins fell from 63% in 2011 to 59% in 2016.

In 2016, 13% of seafarers said they were not able to get adequate rest very often or ever – down from 19% since 2011. But the numbers who described their rest as inadequate all of the time rose from 35% to 53% over the same period.

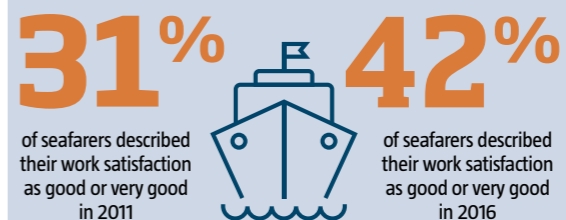
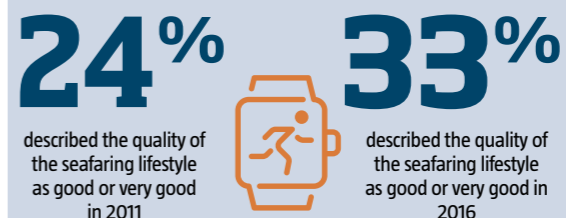
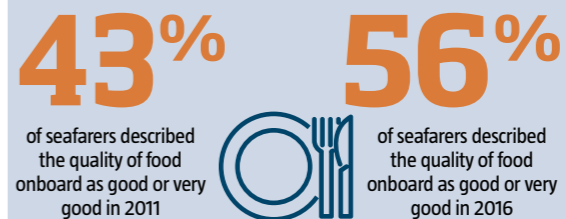
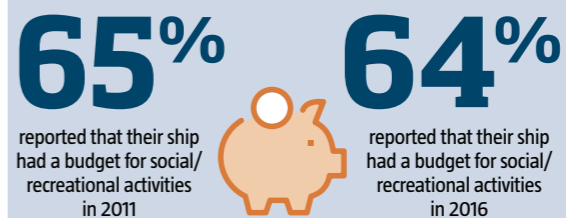
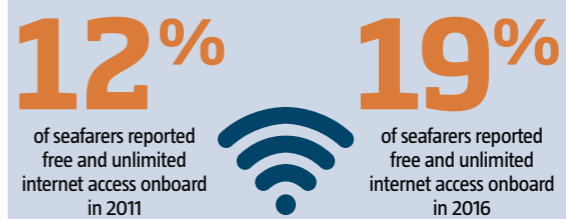
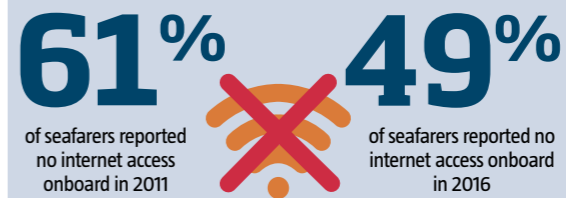
The report notes that well over 90% of seafarers said they were provided with standard personal protective equipment, such as safety shoes, coveralls, ear plugs and goggles. However, much lower levels of provision were reported for things like sun block, malaria tablets and mosquito repellent.

Pointing to research showing a rise in levels of psychological problems being suffered by seafarers, the report stresses the importance of recreational activities and calls for the issues to be addressed as a matter of urgency.

'Facilities which allow seafarers the opportunity for mental restoration are extremely limited onboard cargo ships when compared to workers ashore,' the report adds. 'This has consequences for the mental wellbeing of seafarers and deserves far greater attention from ship operators and regulators, as both an issue to the right to decent working and living conditions and as an issue of safety.'

Although levels of internet access have risen significantly over the five-year period, researchers found

## Findings of the 2011 and 2016 SIRC surveys



that almost half the seafarers with internet onboard are unhappy with connection speeds and only 44% had 'video chat' possibilities. 'These results are disappointing, as they reveal that even where internet connections are made available to seafarers these are of a limited nature and fall short of shore-based standards where video calls are now commonplace,' the report adds.

Email access also increased, but seafarers who were charged for email and internet services reported a substantial rise in hourly charges – from an average of US\$4.792 in 2011 to \$19.607 in 2016.

The vast majority of seafarers (97%) said they took their own mobile phone to sea with them – and the mean number of days per month that they were unable to get a signal rose from 15.23 days in 2011 to 17.51 in 2016.

Researchers said there appears to have been little change over the five-year period in the provision of equipment and facilities such as computer terminals, karaoke machines, and games. Two-thirds of seafarers in 2016 reported access to a gym onboard, 27% had access to a basketball court and 22% had swimming pools.

The report says that while there have been some very important improvements in areas such as contracts and communications, there has been much less progress in reducing the 'institutional nature' of living arrangements and recreational provision onboard.

'This is particularly serious given the concerns about seafarers' mental wellbeing that have been raised by industry bodies such as the UK P&I Club and also in the context of declining opportunities for shore leave whilst serving time at sea,' it concludes.

**The Working and Living Conditions of Seafarers on Cargo Ships in the Period 2011-2016** is available to download free of charge from the SIRC website: [www.sirc.cf.ac.uk](http://www.sirc.cf.ac.uk).



the global  
**seafarer**



**NAUTILUS**  
Federation

A Federation of Maritime Professionals

1 & 2 The Shrubberies | George Lane | South Woodford | London | E18 1BD | UK

T: +44 (0)20 8989 6677  
[www.nautilusfederation.org](http://www.nautilusfederation.org)