

# SAFETY4SEA log

QUARTERLY EDITION ISSUE 19 | SPRING 2017

2017 SMART4SEA Conference & Awards

Key trends towards smart shipping

Be Cyber Aware At Sea

Common safety errors on lifeboat systems



**SOE Marine (Hellas) Ltd.**  
Agencja Lin 2, 185 35 Płock  
Code 210022



## SAFETY

- Cargo Securing CIC results
- TMSA3 in the pipeline

## SEAFARERS

- Report sheds light to fatigue causes
- IMO validates new training courses

## SECURITY

- Sea kidnappings rose in 2016
- Asian maritime crimes down 58%

## SHIPPING

- ICS Flag State Performance Table
- Hanjin Shipping officially sunk



Tue 31 Jan 2017 - Eugenides Foundation, Athens

## 2017 SMART4SEA Conference & Awards Highlights

460

Delegates

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[www.smart4sea.com](http://www.smart4sea.com)

### Panel 1 Smart Perspectives I



Apostolos Belokas  
SAFETY4SEA



SMART4SEA  
www.smart4sea.com



Drew Brandy  
Innarsat Maritime



Tassos Makris  
Goudomichalis



### Panel 2 Smart Perspectives II



Giampiero Sainini  
Volaris Marine



Tassos Makris  
Goudomichalis



Frank Coles  
Transas



Howard Hughes  
Tototheo Group



Howard Hughes  
Tototheo Group



### Panel 3 E-Navigation



Jordan Wylie  
Be Cyber Aware at Sea



240  
Organisations



Eric Knapp  
Honeywell



Torsten Galaske  
Wartsila



Torsten Galaske  
Wartsila



Koninos Seretis  
SRH Marine



Ulf Siwe  
STM Validation



Ulf Siwe  
STM Validation



Ulf Siwe  
STM Validation



Ulf Siwe  
STM Validation



Ulf Siwe  
STM Validation



Willy Zeller  
Navtor AS



Peter Mantel  
BMT Smart Ltd



Peter Mantel  
BMT Smart Ltd



Antony Vourdachas  
ABS



Antony Vourdachas  
ABS



Panos Theopoulos  
Propulsion Analytics



Bastian Gehlke  
Intersicht



Bastian Gehlke  
Intersicht



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SMART4SEA  
AWARDS



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AWARDS



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AWARDS



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AWARDS



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AWARDS



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AWARDS

15

Countries



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AWARDS



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**FEATURE**

# 2017 SMART4SEA Conference & Awards



The 2017 SMART4SEA Conference & Awards, a PRO BONO event, successfully concluded on Tuesday 31st of January 2017 in Eugenides Foundation, Athens attracting 460 delegates from 15 countries representing a total of 240 organizations.

Sixteen (16) global experts presented key smart shipping challenges and introduced solutions for facilitating industry's digitalization. Speakers' presentations were focused on the important issues concerning shipping's revolution into a smart sector such as cyber security, e-navigation, autonomous ships, big data and new technology applications. The inaugural presentation of the SMART4SEA Awards took place at the closing of the forum within

the scope of awarding industry's organizations and associations who have distinguished for their excellence, innovation and technology activities.

The 2017 SMART4SEA Conference & Awards was organized by SAFETY4SEA and sponsored by ABS, Arcadia Shipmanagement, BMT Smart, Dorian LPG, Innarsat, INTERSCHALT Maritime Systems, HEMEXPO, Mobile Technology, NAVTOR, Propulsion Analytics, RISK4SEA, SKILL4SEA, SpecTec, SQEMARINE, SQEACADEMY, SRH Marine Electronics, STM Validation, Tototheo Group, Transas and Wärtsilä.

### 2017 SMART4SEA Awards

The winners of the 2017 SMART4SEA Awards were announced at the end of the forum rewarding

companies which demonstrated remarkable performance towards smart shipping either in excellence, innovation or technology category. The winners namely are:

Innarsat received the SMART4SEA Excellence Award, sponsored by SRH Marine, for its high-speed satellite broadband service, Fleet Xpress, which changes crew lives onboard through greater connectivity with family & friends, video on-demand, social media, online training, telemedicine and measures to shift the administrative burden back to shore. Other short-listed nominees for this category were BMT SMART, Purnimo, Maersk Maritime Technology and Rolls-Royce.

Monalisa 2 STM Validation received the SMART4SEA Innovation Award, sponsored by HEM-

EXPO, for introducing smart solutions for sharing information data which result in efficient, safe and environmentally friendly maritime transport in the EU while at the same time reduce administrative burdens. Other short-listed nominees for this category were: Kongsberg Maritime, Larsoe by Prisma Electronics, Marine Traffic and North of England P&I Club.

Transas received the SMART4SEA Technology Award, sponsored by Tototheo Group, for offering a new simulation concept THESIS (Transas Harmonised Eco System of Integrated Solutions) which facilitates ship, shore and ports to access real-time operation critical data simultaneously that allows for decision-making and responsibility to be shared. Other short-listed nominees for



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this category were: ABS Nautical Systems, Danacore, Nanophos and SpecTec.

### 2017 SMART4SEA Conference

Mr. Apostolos Belokas, Founder and Managing Editor of SAFETY4SEA and Panel Moderator, opened the forum by welcoming speakers and delegates and outlining the objectives of the event towards fostering smart and sustainable shipping. Presentations were given in four panels and ended with a round table discussion and exchange with the audience.

#### PANEL 1

##### Smart Shipping Perspectives

Apostolos Belokas, Founder & Managing Editor, SAFETY4SEA, presented the results of 'the Smart Shipping Survey' which revealed that cyber security, crew training using new technologies & software, energy management & emissions monitoring, e-navigation and ECDIS are the major smart challenges that the industry has to deal with. Mr. Belokas argued that there is need for the shipping to build cyber awareness momentum to move forward. Regarding autonomous shipping, the survey showed that the majority of the participants believe that it will become a reality for the industry beyond 2030. Mr. Belokas commented that two years ago many would argue that industry is far away from this vision and highlighted that autonomous shipping is now coming fast and it is a one-way street.

Drew Brandy, Senior Vice President Market Strategy, Inmarsat Maritime, gave a presentation on "Embracing a new world of smarter connected shipping". He noted that as maritime communication is going through a revolution, the possibility of a truly connected ship and seamless real-time integration with shore-based operations is no longer just concept, but a reality. He therefore explained how connectivity at sea is more than just about communication and how the industry is embracing a new world of safer, smarter, greener and more efficient shipping.

Giampiero Soncini, Director, Volaris Marine Division, shared

his concerns on "The present and future of Fleet management Systems". He explained that currently the idea of crewless vessels has become a serious one, from a laughable topic, with large companies and Classification Societies looking deeply and really into it.

On the other hand, technology is moving fast and at times it is somewhat pitiful to look into the world of shipping, compared to other similar transportation sectors. However, there are still so many companies reluctant to embrace technology or they show

sheer ignorance of the advantages. Mr. Soncini argued that his 50 year-old experience has shown that having a computerized Fleet Management system onboard will be of value. Yet, the lesson is clear: sooner or later, those who have not embraced technology



# 99.9%

## NETWORK AVAILABILITY WHEN IT COMES TO SAVING LIVES AT SEA, THE GMDSS STANDARD HAS BEEN SET

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Every single day, hundreds of thousands of seafarers place their trust in Inmarsat's safety services, knowing we'll be there when it matters most.

inmarsat  
The mobile satellite company

## 2017 SMART4SEA Conference & Awards

### Forum Quotes



**Apostolos Beikos**  
on future of shipping

"Within the next 15 years we will witness more change than the previous 50-70 years."



**Drew Brandy**  
on connectivity at sea

"Today approx. 40% of the 1.2M seafarers have access to internet while at sea. Half of them get internet for free."



**Giampaolo Soncini**  
on the future of Fleet Management Systems

"My 30 year experience has shown that having a computerized Fleet Management system onboard will be of value."



**Tersten Goloske**  
on the future of safe navigation

"There is need for new ways to collect, file and merge information and have adaptive, supportive automation."



**Ulf Siwe**  
on efficient navigation

"Improved efficiency in navigation results in potential fuel savings. Plus ports being predictable which helps planning in the whole transport chain."



**Konstantinos Seretis**  
on technology for e-navigation

"Technology is available but we need to use it properly; stakeholders need to get more involved, IMO needs to step up as well."



**Tasos Makris**  
on software quality in shipping

"The quality of software on board our vessels needs improvements. AMMITEC will start a campaign to inform industry of the benefits onboard and ashore."



**Frank Coles**  
on the concept towards smart shipping

"We have to rethink the whole concept of ship operations; this requires learning from other industries, dropping some traditional concepts and accepting challenge of change."



**Howard Hughes**  
on cyber security trends

"Cyber Security has evolved over the years into a massive business that incorporates all matters from Denial of Service attacks, to obtaining personal or corporate information."



**Willy Zeiler**  
on ECDIS

"Compared to paper charts, approximately 85% is available in digital format today."



**Peter Mantel**  
on Fleet Performance Management

"Advances in technology, connectivity and data collection have made the Fleet Performance Management industry more complex."



**Antony Vourdochos**  
on Big Data

"For the future of Big Data in shipping we need to consider on integration of systems, cargo tracking, remote operations, centralized knowledge and cyber security."



**Jordan Wylie**  
on 100 Cyber Aware At Sea Campaign

"67% of CSOs said 'Cyber Security is not a serious threat' and 91% of SSCs said 'We don't have the training to deal with cyber threats'. These findings were the catalysts for the 100 Cyber Awareness At Sea campaign."



**Eric Knaepen**  
on voice advantage

"Voice implementation in maintenance and inspections increases overall productivity as it reduces maintenance costs."

Full Live Blog at:  
<https://goo.gl/VolPzv>



**Bastian Gehnke**  
on improving fleet performance management

"Evaluation of historical data can help to draw conclusion about current problems."



**Panos Theodossopoulos**  
on smart shipping

"Smart shipping era is here; my advice is to start with realistic goals and do not forget the customer pain points."

Full Live Blog at:  
<https://goo.gl/VolPzv>





# 2017 SMART4SEA Conference & Awards

Tuesday, 31 January 2017, Athens  
Fostering Smarter & Sustainable Shipping



We congratulate all Shortlisted Nominees!



Event Dedicated Website at [smart4sea.com](http://smart4sea.com)

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will disappear.

Tasos Makris, IT Director, Gourdouchalis Maritime, focused on the "Software Quality in the Maritime Sector". Without any doubt, he said, the quality of software on board vessels needs improvement: less bugs, easier to use, easier to learn, easier to remember, preventing errors, help stored locally on board, better facilities to report errors. Mr Makris noted that the advances made on the maritime communications and bridge equipment during the last decade, have not been matched so far by improvements on the on-board software. He referred to a research conducted by AMMITEC among its members which gathered the 15 most important guidelines that apply to maritime software with the aim to enhance quality. Conclud-

ing his presentation, he informed the delegates that AMMITEC intends to start a campaign to raise stakeholders' awareness of the benefits of quality software onboard and ashore.

## PANEL 2 Smart Perspectives II

Frank Coles, CEO, Transas, provided insight into "The Smart Connected Ship, Big Data and Cybersecurity towards Smart shipping". Mr. Coles pointed out that, with all the talk about smart ships, automation and even unmanned ships there remains three key elements that need to be resolved: the ecosystem in which they would operate, the connectivity that they require and the overall cybersecurity picture. The first is currently dysfunctional, the second is expensive and not

fit for purpose and the third is simply open and exposed and misunderstood. Mr. Coles urged to rethink the whole concept of ship operations by learning from other industries, dropping some traditional concepts and accepting challenge of change. He further discussed the current state, the risks, requirements for resolution and suggested a new eco system that will enable shipping in the future.

Howard Hughes, Chief Technology Officer, Tototho Group, presented the current "Cyber Security Trends" noting that even the name has been changed over the years; formerly it was known as IT Security, or to some, just the use of a Firewall. Whatever the name, the seriousness of the subject has intensified. Now with everyday access to the internet and social media, propagation of misinformation and harmful contents can be passed around with great ease, he added. A Firewall is no longer the total solution. In his presentation, Mr. Hughes covered the activity in the world of cyber security for the past 12 months, and investigated how this has affected the maritime world.

Jordan Wylie, Communications Officer, Be Cyber Aware at Sea Campaign, gave a presentation entitled "Is Online the New Frontline?" where he highlighted the importance of the human factor in managing the cyber risk at sea. With most cyber and information security breaches on board being a direct result of human error, Mr Wylie informed the audience that awareness and training should be the starting point for all ship owners as we advance further into the digital era of shipping. Mr. Wylie spoke about the Be Cyber Aware At Sea campaign and demonstrated that ship-owners do not need to invest huge amounts of capital to start mitigating this emerging risk, they just need to change their attitude towards cyber and address the challenges from the board room through to the engine room, he stated that online is the new frontline and fortune favors the prepared.

Eric Knaapen, Regional Sales Manager Europe, Honeywell Sensing & Productivity Solutions, focused on the "Future of Maintenance & Inspection". He highlighted that for effective maintenance and inspection there is need for defined process and steps, structured data input & output, hand-busy & eyes busy environment and finally guidance & documentation. During his presentation, Mr. Knaapen provided a good sense of how his company solution is able to help and improve business performance with a specific focus around various workflow processes.

## PANEL 3 e-Navigation

Torsten Galaske, Service Sales Manager, Marine Solutions, Wärtsilä Electrical and Automation, investigated the "Future of safe navigation". He noted that most navigational accidents due to human error have a root cause in cognitive workload, information overload and automation. Therefore, he suggested, the focus should be on new ways to collect, file and merge information, present information unambiguously and have adaptive supportive automation. He also said that future navigation includes augmented reality and bridge design supporting Bridge Resource Management.

Ulf Siwe, Communications Officer, STM Validation, explained the importance of "Containerisation of maritime information". Mr. Siwe stated that containers have revolutionized the efficiency in goods handling. It was the standardization in the 60s that made it possible for the whole industry could build cost-effective systems for loading and storing and much more. Sea Traffic Management has introduced a similar approach for maritime information; real-time data is the "container". Mr. Siwe suggested setting the standards, creating open interfaces and providing a solid infrastructure. Route Exchange is the first standard with potential to increase safety and efficiency in double-digit numbers, he stated.

Konstantinos Serresis, Projects and Product Development Manager, SRH Marine Electronics SA, referred to "ECDIS and Digital Products as part of E-Navigation". He briefly explained the



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e-navigation concept; it includes the harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means, therefore, ECDIS & Digital Products have major role. Two other very important elements are Training and Support required for both Hardware and Software. Mr. Seretis highlighted that "e-Navigation" concept is moving forward within next years on the basis of "Paper" to "Digital" World transition. This change has not been concluded yet. It is coming more and more, fully based on ECDIS, ENC's and Digital Products full implementation, he said.

Willy Zeller, Marketing & Communications Manager, NAVTOR AS, addressed concerns regarding "e-Navigation, ECDIS & Autonomous Ships". Mr. Zeller highlighted that e-Navigation is central to delivering tomorrow's



technology, but its powerful benefits can be exploited today. Using data as a facilitator, it simplifies tasks, reduces workloads, enhances safety and environmental performance, and delivers real economic advantages for the industry. Autonomous vessels are a natural step forward for the discipline, with connected, digitized ships that perform with optimal efficiency, safety and security. Whether they switch to full autonomy or not, he suggested that e-Navigation will soon become central to the voyages of all sea-

going vessels; that is a science fact, he finally stated.

**PANEL 4 Energy Efficiency**  
Peter Mantel, Managing Director, BMT Smart Ltd, focused on "Fleet Performance Management" which has finally come of age, and is now recognized as a key part of every shipping company's operations. Advances in technology, connectivity and data collection have made the Fleet Performance Management industry more complex. Conse-

quently, many ship owners are neither seeing the results that Fleet Performance Management can deliver, nor getting a return from their investment. Despite early wins for many ship owners around Fleet Performance Management, there is still a significant opportunity to make game changing performance gains, Mr Mantel commented. He further highlighted that shipping needs to modernise and changes are required the way the industry works from Fleet Performance Management (FPM) to Managed

Fleet Performance (MFP) by providing a complete managed service.

Antony Vourdashas, Senior Engineer, ASS, gave a presentation on "Analyzing Big Data - Managing data flows and using the information". He argued that international regulations and operational costs are key drivers in today's shipping industry in terms of vessel performance. Increasing regulatory compliance requirements add complexity to an already challenged market, while the volume of the data to

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satisfy such regulatory reporting is increasing. In parallel, the proliferation of low cost sensor technology and the interlinking of systems onboard a vessel have further increased the volume of data being collected and needing to be analyzed, he added. This leads to a challenge when

handling, storing, analyzing and presenting such "big data". Mr. Vourdashas addressed some of these challenges and potential solutions to have in mind.

Bastian Gehnke, Vessel and Fleet performance Technical Product Manager, INTERSCHALT Maritime Systems, presented the

"Practice of data driven decision making for an improved fleet performance management". Mr. Gehnke said customer's experience has showed that turning data into knowledge is the main challenge of big data. Based on facts and figures out of practice, he explained how shipping owners make use out of collected data. Different use cases were shown and the process of automated performance analysis was also presented.

Panos Theodoropoulos, CEO, Propulsion Analytics, gave a presentation entitled "Big Data or Smart Data? The case of engine performance monitoring" providing his view on the balance between shipping industry needs and technology trends, by focusing on this case. The use of data analytics, physical models and human expertise was presented as the optimum combination in order to achieve useful and actionable results for the ship operator. He commented

this approach forms the basis of a new cooperation between the company and the engine developers Winterthur Gas & Diesel, for the development of an on-board system that ensures the engine is running in the most efficient way, minimizes downtime and supports the on-board crew with troubleshooting.

Finally Apostolos Belokas, Forum Chairman, thanked the delegates for their participation, the sponsors and supporters for their support and the speakers for their excellent presentations and also the organizing team of the event for their contribution towards forum objectives. Explore more at <http://www.safety4sea.com/forum/2017-smart4sea-forum/>



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# Only 37% companies are prepared for cyber threats

The 2017 Global Opportunity Report, released by DNV GL, Sustainia and the UN Global Compact, reveals that many companies are not prepared or even understand the cyber risks faced, as only the 37% of the organizations have a cyber incident response plan in place. The report suggests the following opportunities for cyber threats:

**1** Artificial Intelligence (AI) is an opportunity space offering to move institutions, businesses, and individuals two steps ahead of the next cyber attack.

**2** Utilising gamification tools, companies can transform employees from cyber security risks



into assets.

**3** Behavioral biometrics analyses specific human behavior with intelligent software, adding

a new layer of security to verifying identification that is nearly impossible to replicate. Explore more at <https://goo.gl/ORjGvk>

## Sea service records go online

The Danish Maritime Authority has, as of January 2017, removed the mandatory reporting of the signing on and off for Danish ships, providing a new digital solution. Now, it is fast and easy for the seafarers to type in their seagoing service before applying for certificates. They can, inter alia, see whether they have sufficient seagoing service to have their certificates renewed, keep track of their seagoing service and get digital access to their data.

# New industry data platform launched

DNV GL launched a new industry data platform named 'Veracity' designed to help industry companies improve data quality and manage the ownership, security, sharing and use of data. By creating frictionless connections between data owners and users, the platform aims to create new opportunities for improving ship performance and safety, while at the same time reducing operational costs. Remi Eriksen, President and CEO of DNV GL, said: "The potential for using data more



smartly in our industries is enormous. Companies have always turned to us for independent, expert assessments and best practices – to build trust in the safety, efficiency and

sustainability of their physical assets or operations. We are not looking to own data, but rather to unlock, qualify, combine and prepare data for analytics and benchmarking," says Eriksen.

## bulletPOINTS

### HHI chooses NAPA Steel

HHI says to implement NAPA Steel's 3D-model-based ship structural design tool for paradigm shift in ship design.

### Contract for drone inspection

Sky-Futures awarded a 3-year contract to inspect Eri facilities globally. This contract is said to represent a significant shift in the oil and gas market.

### Tototheo Group vessels commit to Fleet Xpress

Satlink will bring more than 1,500 vessels to the Fleet Xpress service over a five-year period.

### Furuno delivers 43 STM systems

Furuno, will provide 43 ships with STM-compatible on-board systems for route optimisation, enhanced monitoring, port call synchronisation, STS route exchange.

### Next generation technology for Global Xpress

Inmarsat, in conjunction with VT IDirect, achieved a forward channel throughput rate of 330 Mbps over a live Inmarsat GX satellite in orbit.

### New chartering software launched

Maritime software development company SSD are launching V-Chartering – a new cloud chartering platform for wet and dry brokers to manage the entire chartering process.

### New online shipping platform available

Veson Nautical has launched Veslink IMOS-live, a platform that combines the existing IMOSlive cloud infrastructure with the web accessibility.

### New digital cooperation signed

CMA CGM and ALIBABA OneTouch have signed agreement for in the digital area, following Maersk's example. Maersk launched a pilot program on Alibaba OneTouch portal on December 22, 2016, moving a step forward to providing fully digitized customer solutions.