SEPTEMBER 2016

C.I.A.N.A.M.
Cámara Interamericana de Asociaciones Nacionales de Agentes Marítimos

NEWSLETTER Nº 9

May 9th and 10th, 2016
XIII Annual Meeting
Asunción, Paraguay

The XIII Annual Meeting of the Cámara Interamericana de Asociaciones Nacionales de Agentes Marítimos (CIANAM) took place in the City of Asunción, Paraguay, on May 9th and 10th, 2016. Delegations from National Associations in Argentina, Brazil, Costa Rica, the United States of America, Mexico, Panama, Paraguay, Peru and Uruguay were present at this event.

Specially invited, the President of the Cámara de Armadores Fluviales y Marítimos in Paraguay, Juan Carlos Muñoz Mena took part in the opening ceremony of the Meeting. He discoursed on the foreign trade and maritime industry in his country.

The Meeting was presided over by the President of CIANAM, Francisco Orozco Mendoza from the Asociación Mexicana de Agentes Navieros, together with the President of the Asociación de Agentes Marítimos del Paraguay, Elsa Gamarra

Contents

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and the American Vicepresident from the Federation of National Associations of Ship Brokers and Agents, Javier Dulce.

During the development of the Meeting, issues related to the institutional activity of CIANAM were dealt with. The foreign trade and its impact on port and maritime transport in the region were analysed. Issues related to the profession of ship agents as well as the efforts made in training and quality management in order to reach the best goals of management and efficiency were also discussed. There were presentations on the verified gross mass of containers in light of the coming into force of the Amendment to SOLAS Convention and on the Defense of Competition updating the regulatory framework.

Delegates from present Associations recognized the importance in education in order to promote the highest level in service and to ensure the full observance of legal rules. They agreed in promoting the implementation of basic rules for the training and certification of agents as well as the establishment of internationally recognized standards for professional accreditation.

On this occasion, it took place the election of the new Board of Directors being elected as President, Mike Oggle from the Association of Ship Brokers and Agents in the United States of America; Vicepresidents, Felipe Bracamontes from the Asociación Mexicana de Agentes Navieros and Waldemar Rocha Junio from the Federación Nacional de Agencias de Navegación Marítima in Brazil; Treasurer, Ramón Pampin from Centro de Navegación in Uruguay and Board Members Elsa Gamarra from the Asociación de Agentes

Marítimos del Paraguay, Javier Dulce from the Centro de Navegación in Argentina and Carlos Rivera from the Cámara Marítima in Chile.

All those delegations that were present accepted and welcomed the offer made by the Asociación Mexicana de Agentes Navieros to organize the XIV Annual Meeting on April 2017.

New member of CIANAM
Cámara Nacional de Armadores y Agentes de Vapores de Costa Rica

It is with much pleasure that we welcome the Cámara Nacional de Armadores y Agentes de Vapores (NAVE) of Costa Rica into CIANAM membership. Costa Rica formally applied for membership early this year and this was approved unanimously by delegates at the CIANAM Annual Meeting held on May 9th.

Board of Directors 2014 - 2016

At the CIANAM Annual Meeting held in the city of Asunción, Paraguay, last May 9th, the new Board of Directors was formed as follows:

President:
Mike Ogle (Association of Ship Brokers & Agents USA - ASBA) – United States

First Vicepresident:
Felipe Bracamontes (Asociación Mexicana de Agentes de Navieros - AMANAC) - Mexico

Second Vicepresidente 2:
Waldemar Rocha Junior (Federacion Nacional de Agencias de Navegación Marítima - FENAMAR) - Brazil

Treasurer:
Ramón Pampin (Centro de Navegación - CENNAVE) - Uruguay

Board Members:
Elsa Gamarra (Asociación Agentes Marítimos del Paraguay - ASAMAR) - Paraguay
Javier Dulce (Centro de Navegación) - Argentina
Carlos Rivera Heavey (Cámara Marítima y Portuaria de Chile) - Chile

Tax Committee:
Francis Zeimetz (Cámara Marítima de Panamá - CMP) - Panama
Sabino Zaconeta (Asociación Peruana de Agentes Marítimos - APAM) - Peru
Edwin Mora (Cámara Nacional de Armadores y Agentes de Vapores -NAVE) – Costa Rica

General Secretary
Roberto Barrero (Centro de Navegación) - Argentina

CENNAVE celebrated its first century
July 28th, 2016

The Centro de Navegación celebrated its first hundred years of life last July 28th in the main hall of the Escuela Naval.

About 400 people participated of the three hour lunch to celebrate the 100th Anniversary of CENNAVE. National government authorities, Argentine government authorities, main representatives of the maritime port community of Argentina, Brazil and Paraguay and Institutes such as CIANAM and FONASBA were also present at the event.

The President of CENNAVE, Alejandro Gonzalez gave a speech that highlighted the path that the Centro has taken and its strong commitment to the region and the future.

"During the years, the Centro has not deviated from non-negotiable values and assumptions such as ethics, institutional responsibility, free competition, the management and care of the general interest, along with the defense of its members.". With these guidelines, the president marked what is and will be the Centro de Navegación.

"I want to thank Mr. President Mauricio Macri, and current authorities of the Government of our sister Republic Argentina for lifting the Regulation 1108." After these expressions, there was an enthusiastic applause by the attendees, including the ambassador of the Republic Argentina Guillermo Montenegro, Minister of Transport of that country, Guillermo Dietrich, and representatives of Centro de Navegación of Argentina and other leading authorities of the neighboring country.

The event was attended by the highest authority of the Asociación de Agentes Marítimos del Paraguay (ASAMAR), Elsa Gamarra. In this regard, Alejandro Gonzalez stressed and thanked "the authorities and especially the private sector of the sister Republic of Paraguay for their continued support and confidence in Uruguay and its ports."

After expressing an explicit commitment with MERCOSUR, -the representative of FENAMAR (Federación Nacional de Agencias de Navegación Maritima de Brasil) was also present- within the framework of the reality of Hidrovia, President Alejandro Gonzalez ended his speech with a message for the next 100 years.


Centro de Navegación
1916 - 2016
100
AÑOS


Centro de Navegación
1916 - 2016

"Again, there is no other purpose for the Centro de Navigación, than to help position our country as a first class reliable port and logistics platform, with increasingly trained people who are happy to be part of this activity and Shipping companies entrusting their various businesses to Uruguay and its people."

ASBA Annual Cargo Conference

September 28th – 30th, 2016, Miami – Estados Unidos

Between September 28th and 30th, 2016 the 14th Annual Cargo Conference of the Association of Ship Brokers & Agents (USA) INC (ASBA) will be take place in the city of Miami, United States.

The meeting will be held once again in the Eden Hotel in Miami Beach, Florida. An excellent group of speakers have been gathered to address the question, “What’s On The Horizon?” They will share their views on market trends in both the tanker and dry cargo trades. The keyspeaker is Gary Vogel, Chief Executive Officer of Eagle Bulk Shipping Inc.

For further information, visit the website: *http://www.asba.org/annual-cargo-conference.* Recognized as one of the “Must Attend” Maritime Conferences in the USA, registration is now open via website at**:** 2016 Registration Form

NAVE participated in the XXXVIII Congress of Port Meeting of the Central American Isthmus

Cámara Nacional de Armadores y Agentes de Vapores de Costa Rica (NAVE) participated in the XXXVIII Congress of Port Meeting of Central American Isthmus (REPICA) held in Costa Rica from 19 to 22 July 2016, in which the formentioned Camera was present in all the activities and visits to the different ports on the Atlantic and Pacific, as well as being sponsor of the event.

Waldemar Rocha Junior
President of FENAMAR

In the General Assembly held on August 05th in the city of Vitoria, Brazil, Mr. Waldemar Rocha Junior was, by acclamation, re-elected as President of **Federacion Nacional de Agencias de Navegación Marítima** (FENAMAR) for a three-year term, beginning August 2016.

Felipe Bracamontes
President of AMANAC

Felipe Bracamontes takes oath as President of the Asociación Mexicana de Agentes Navieros (AMANAC) for the period 2016-2018.

MEXICO CITY, June 8, 2016 - The Annual Meeting of the Asociación Mexicana de Agentes Navieros, A.C. (AMANAC), unanimously elected Mr. Felipe Bracamontes Venegas as President of this organization for the period 2016-2018.

The structure of the new Board is formed by Francisco Orozco, Ricardo Eversbusch and Andrés Echeverría in the Vicepresidency; Bernardo Varela in Secretariat; Norma Becerra in Treasury and José Enrique Fabela, Vladimir Quintero, Bernardo Vela, Carlos Corey and Armando Reyna as board members.

Felipe Bracamontes has extensive experience in management positions in the maritime sector; and currently he serves as head of the division in Mexico Port Terminals of the shipping company Hapag-Lloyd.

Felipe Bracamontes welcomed the forthcoming XIV Annual Meeting of CIANAM to take place in the port of Veracruz in April 2017 and which will host AMANAC.

The aim of his presidency is to increase the participation and presence of AMANAC with the public and private sector and with the authorities of the Congress, in particular with the Secretariat of Communications and Transportation (SCT) as the organization in charge of the sector.

During the swearing, Francisco Mendoza Orozco received recognition of his work during his presidency between 2014-2016.

Before the full members of this Institute that groups the shipping agents and maritime and port representatives, the new leader announced that by the end of the year AMANAC expects to acquire the level of Industrial Chamber, in order to optimize their participation in public policies of their country.

He also announced the launch of a new system online to facilitate consulting statistics of port movements, so as to measure the performance and mobility of foreign trade from a business perspective.

Guillermo Hernández
President of Centro de Navegación - Argentina

Javier Dulce – Guillermo Hernández – Santiago Díaz Mathé

At the last General Annual Meeting held on August 30th, in Buenos Aires, Argentina, the election of the Board of Directors of the Centro de Navegación took place.

As a result, the new Board of Directors for the period 2016 - 2018 is formed by **Mr. Guillermo Hernández as President**, Javier Dulce, 1st Vicepresident; Patricio Campbell, 2nd Vicepresident; Andrés Robinson, Secretary; Santiago Diaz Mathé, Deputy Secretary; Julio Delfino, Treasurer; Nicolas Starzenski, Deputy Treasurer and Guillermo Paroli, Fernando Cors, Fernando Maggi and Alejandro López as Members.

The Deputy Members are María Laura Filippello, Martín Silman, Enrique Elliot, Roberto Cegelnicki and Gustavo Fandiño.

Is Container Freight Now a Commodity?

In an interview with Patrik Berglund, the Xeneta CEO says that the introduction of the "commodity" status for the container would benefit both shippers and carriers.

Q- In today's world of Amazon, Alibaba and E-commerce, have container rates (meaning 20-40'dry box) reached 'commodity' status?

Not exactly. There is a major difference between 'cheap' and being a 'commodity.' Clearly the current rates are very low, and in fact threatening the financial viability of 4-6 ocean carriers, but business cycles, as set by supply and demand, are part of the global economic cycle.

Q – What is the difference between 'cheap' and 'commodity?"

A – Business has changed in the last 20-25 years. Even before the internet boom, finance and labor changed world trade. Use textiles or computers for an example; why would you make socks or laptops in Manchester or North Carolina when you can build or finance a mill in Bangladesh or China and make them for a 10th of the price? That's what I mean by 'cheap.'

Q – Those aren't commodity items?

A- I agree they're called that, but it's not exactly correct. Commodities are traded on exchanges: sugar, aluminum, coffee, Brent Crude, or copper are easy examples. The London Metal Exchange (LME), the Cocoa-Sugar-Coffee Exchange (CSCE), the Chicago Board of Trade are all registered and highly-regulated exchanges with specific contract requirements, dates, and trading rules. This regulation and transparent pricing enables prices to rise, as well as fall, which show the true measure of price as evidenced by supply & demand.

Q-But right now ocean freight rates are low; what's wrong with that?

A-Nothing-if you're a shipper, but everything, if you're a carrier. HMM and Hanjin are teetering on bankruptcy; UASC lost a reported US $ 500 million last year, I believe only Maersk, MSC, and CMA CGM earned a profit in 2015. What do you think will happen to rates if the 4-6 weaker carriers merge or disappear? Rates will skyrocket; all those Asian-sourced retail and wholesale items on which the western world, Africa, and Latin America relies will become much more expensive.

Q-How would making container freight a commodity avoid this?

Because items traded on an exchange can be hedged. Take Aluminum, as traded on the LME. You can buy or sell forward up to 123 months (10 ¼ years) or buy & sell options up to 63 months (5 ¼ years). Additionally, you can do your trading in US Dollars, Yen, Sterling, or the Euro. Think of the ability to minimize risk this would give to the carriers, shippers, and their banks!

Imagine how healthy a carrier would be if they'd sold forward 3-5-7 years when China-Europe rates were in the $ 1,500-2,000 range.

On the other hand, imagine a shipper who bought freight contracts 2-3-5 years forward now, and then rates shoot up after a few carrier bankruptcies, or when the Chinese economy recovers even 1-2%?

Q –Can you give us a practical example of how this would work?

A – Yes. There is about a 2 year lead time from ordering a Megaship until she's first loaded. The day you sign with the shipyard, prudent management would sell forward the amount of contracts that equals the expected TEU's carried annually for that ship 2-5-7-10 years out. Your profit for that vessel is locked-in-regardless of whether rates go up, down, or sideways in that same time period.

Q – TEU-rates 10 years out; is this not a difficult concept to understand?

A- Why? Carriers and airlines already hedge fuel; what's the difference?

Q- That's a fair point. How would hedging work for the shipper?

It depends on the needs of the shipper. For examples shippers such as Walmart and Carrefour need volumes of TEU's for a variety of merchandise, some which can be very price-sensitive. They would buy the appropriate number of TEU contracts for that time period, which would lock in their pricing and profit for that item.

Q-How would prices be set?

Well, of course I'd suggest our platform be used. We track more than 60,000 shipping lanes with real-time, actual rates. Transparency of rates is key, and both carriers and shippers know we offer that. But shippers and carriers need to change their current adversarial mindset; they need each other to succeed regardless of rates being high or low.

Source: **By Andrew Lubin** at MarineLink

NACIONES UNIDAS
UNITED NATIONS

CEPAL
ECLAC

Container Throughput in the Region's Ports Rises 1.7% in the year 2015

The movement of cargo in containers in Latin American and Caribbean ports grew 1.7% during 2015, according to figures unveiled in ECLAC's new edition of its ranking of container port throughput, published in its Maritime Profile,. These figures confirm two trends observed during the last years in the region: the slowdown of foreign trade shown by container terminals and great heterogeneity of the growth rates inside the region.

Regional average of 1.7% container throughput growth, although still higher than the rate recorded in 2014 (0.8%) and 2013 (0.7%), the recovery from this severe downturn remains (figures from 2012 were 5.9%). The slow dynamism of 2015 was determined mainly by the fall in the port activity of five countries: Brazil, Peru, Puerto Rico, Trinidad & Tobago and Venezuela. The total volume of activity in 2015 was approximately 48 million TEU. The first 40 ports in the ranking accounted for nearly 90% of the operations this type of cargo in the region, while another 98 smaller ports divided up the remaining 5.9 million TEU (equivalent to 10%) among themselves.

The figures reveal great heterogeneity in the performance of port movements, both at a subregional level as well as by country. In 2015, ECSA's activity reduction reached 1.4%, this especially considering the lower expansion of throughput in Brazilian ports, where the port movements fell by 2.1% compared to the previous year. WCSA results suggest a slight increase in container throughput, with a positive variation of 1.1%. The stagnation of the container ports in Chile (0.1%) and the negative variation of Peruvian ports (-3.6%) counterbalances the growth rate in Ecuador (6.3%) and the Port of Buenaventura in the Pacific Coast of Colombia (6.6%). Central America dropped 0.1% reaching 3.4% last year versus a growth of 3.5% in 2014, whilst the *throughput* figures of the Caribbean *ports* remained flat with only +0.1% change.

At a country level, six countries stood out: Colombia (13.1%), Nicaragua (24.4%), Barbados (10.3%), St. Vincent and the Grenadines (11.3%), Monserrat (11.7%), and Anguilla (27.7%), while other six countries from the region have showed an important slowdown in their activity: Argentina (-0.3%), Brazil (-2.1%), Peru (-3.6%), Puerto Rico (-8.3%), Trinidad & Tobago (-12.4%),and Venezuela (-22.2%). Mexico increased its port activity considering the 3.8% figure of 2014 to.7.4% in 2015. In Central America, the reduced growth of Panamanian ports during 2015 hides and important rise in the port activity of some countries of the sub-region. Throughput increased in El Salvador (6.4%), Guatemala (6.9%), Honduras (8.9%) and Nicaragua (24.4%).

At an individual level, the ports that registered a relatively better performance during 2015 were: Santos (3,645,448 TEU), Colón (3,577,427 TEU), Balboa (3,294,113 TEU), Cartagena (2,606,945 TEU), Manzanillo (2,458,135 TEU), El Callao (1,900,444 TEU), Guayaquil (1,764,937 TEU), Kingston (1,653,272 TEU), Buenos Aires (1,433,053 TEU) and Freeport (1,400,000 TEU). See Table:"Latin American and the Caribbean Container Port Throughput, Ranking 2015"in annex for details. Just as in previous periods, the reasons behind growth, deceleration or an outright decrease in port activity are varied. For example, the ports of Cartagena 16.6% (Colombia), Colón 8.8% (Panama), Guayaquil 8.9% (Ecuador), Manzanillo 4.4% (Mexico), Veracruz 9.9% (Mexico), and San Antonio 7.0% (Chile) registered positive figures due to the success of their projects and commercial management, while others were affected by low trade performance in general as in the case of El Callao -4.6% (Peru), Puerto Cabello -19.2% (Venezuela), Valparaíso -10.7% (Chile), San Juan -8.8% (Puerto Rico), Río de Janeiro -28.0% (Brazil) and Balboa -5.0% (Panama).

Latin American and the Caribbean Container Port throughput, Ranking 2015

Throughput (TEU) & change 2015/2014 (%)

Ranking	Puerto/Port	País/Country	2013 (TEU)	2014 (TEU)	2015 (TEU)	Variación/change % 2015/2014
1	Santos	Brasil	3,451,123	3,569,870	3,645,448	2.1%
2	Colón	Panamá	3,356,060	3,286,736	3,577,427	8.8%
3	Balboa	Panamá	3,187,387	3,468,283	3,294,113	-5.0%
4	Cartagena	Colombia	1,987,864	2,236,551	2,606,945	16.6%
5	Manzanillo	México	2,118,186	2,355,149	2,458,135	4.4%
6	Callao	Perú	1,856,020	1,992,473	1,900,444	-4.6%
7	Guayaquil	Ecuador	1,519,059	1,621,381	1,764,937	8.9%
8	Kingston	Jamaica	1,703,949	1,638,113	1,653,272	0.9%
9	Buenos Aires	Argentina	1,784,800	1,428,843	1,433,053	0.3%
10	Freeport	Bahamas	1,379,296	1,400,000	1,400,000	0.0%
11	San Juan	Puerto Rico	1,269,902	1,319,961	1,210,503	-8.3%
12	San Antonio	Chile	1,196,844	1,093,625	1,170,184	7.0%
13	Limón-Moin	Costa Rica	1,053,734	1,089,518	1,108,573	1.7%
14	Lazaro Cárdenas	México	1,051,183	996,654	1,068,747	7.2%
15	Veracruz	México	866,966	847,370	931,613	9.9%
16	Buenaventura	Colombia	851,101	855,404	911,533	6.6%
17	Valparaiso	Chile	910,780	1,010,202	902,542	-10.7%
18	Caucedo	Republica Dominicana	1,033,311	831,375	826,935	-0.5%
19	Montevideo	Uruguay	826,962	776,558	811,297	4.5%
20	Paranaguá	Brasil	730,723	757,319	782,346	3.3%

On a global scale, during 2015, the containers traffic in ports also had a low dynamism. The global container throughput grew by only 1.1% in 2015, according to Alphaliner's estimates based on a preliminary survey of over 400 ports worldwide. Last year's global throughput growth logged the second lowest annual growth rate ever recorded for the industry, surpassed only by the record low of 2009 when it declined by -8.4% due to the global financial crisis.

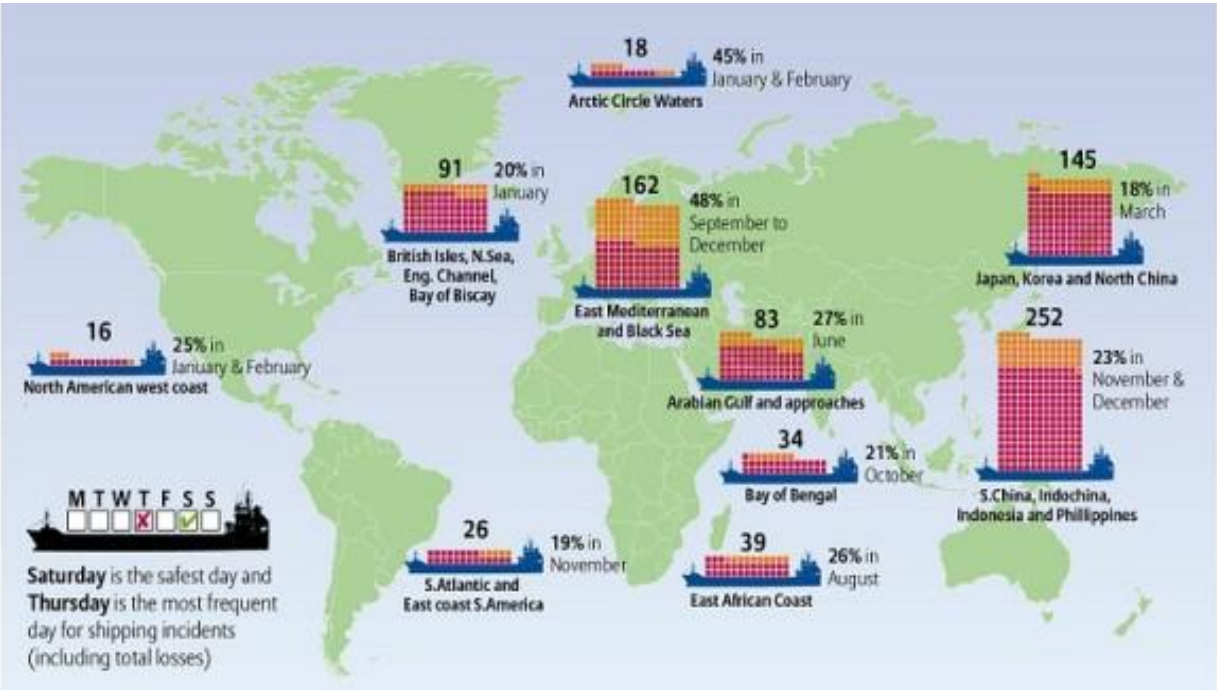
In relation to the causes, several factors have contributed to the lower container throughput growth in recent years, including: the impact of the technological change of conversion from breakbulk to a containerized mode of transportation has plateaued; increased share of manufactured goods versus raw materials transported by containers, and a corresponding trend of miniaturization of manufactured goods; the rate of offshoring of manufactured activities to Asia and especially to China has slowed; changes in the imbalances of trade: the decelerated growth of laden container volumes in one direction leads to the lower volume of container goods, as well as to the reduced empty container handling; reduced incidence of container transshipment, as more ports are served directly. Various ports in Southeast Asia, Latin America or Africa that were previously connected mainly by feeder or relay services have attracted mainline calls as volumes increased while port facilities have been improved.

Source: **Octavio Doerr. Infrastructure Services Unit | NRID | ECLAC | United Nations**

Allianz: Safety & Shipping Review 2016

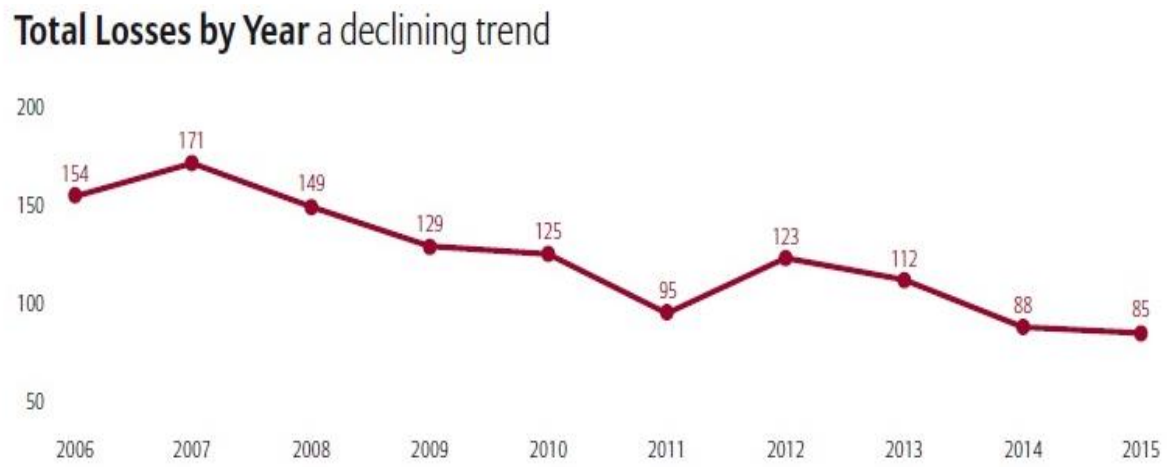
Allianz Global Corporate & Specialty (AGCS) has issued annual "Safety and Shipping Review ", a report which focuses on key developments in maritime safety and analyzes shipping losses (of over 100 gross tons) during the 12 months prior to December 31, 2015. According to the report, the maritime industry saw the number of total losses remain stable during 2015, declining slightly to 85; the lowest total for a decade and the second year in a row annual losses fell below 100.

- 85 large ships lost worldwide in 2015, down by 45% over a decade.
- Cyber exposure, "mega ship" salvage issues, and extreme weather heighten risk environment.
- Ship losses and piracy attacks up in top global hotspot –South East Asian waters.
- Economic and market conditions are pressurizing costs, raising safety concerns



Total Losses 2006-2015: When and where

Losses declined 3% compared with 2014 **(88).** The 2015 accident year represents a significant improvement on the 10-year loss average **(123**). Large shipping losses have declined by **45%** over the past decade, driven by an increasingly robust safety environment and selfregulation.



Source: Lloyd's List Intelligence Casualty Statistics. Data Analysis & Graphic: Allianz Global Corporate & Specialty

However, regional disparities remain. More than a quarter of all losses in 2015(**22)** occurred in the **South China, Indochina, Indonesia and Philippines** maritime region, which has been the top loss hotspot for the past decade. Losses are up year-onyear and are double those of the next highest loss region, **East Mediterranean and Black Sea (11).**

Total Losses by Top 10 regions:
from January 1, 2015 to December 31, 2015

The lowest total for a decade

S. China, Indochina, Indonesia and Philippines	22
East Mediterranean and Black Sea	11
Japan, Korea and North China	8
British Isles, N. Sea, Eng. Channel, Bay of Biscay	4
Arabian Gulf and approaches	3
East African Coast	3
Red Sea	3
West African Coast	3
Bay of Bengal	2
US Eastern Seaboard	2
Others	24
Total Losses by Region	**85**

Cargo (36) and **fishing (16)** vessels accounted for over 60% of ships lost with cargo losses increasing for the first time in three years. **Foundered (sunk/submerged)** is the most common cause of loss, often driven by bad weather, accounting for almost **75% (63), up 25%** year-on-year.

In total, there were **2,687** reported shipping casualties (incidents) during 2015, **down 4%** year-on-year. The **East Mediterranean and Black Sea region (484)** remains the global hotspot. Together, with the **British Isles, N.Sea, Eng. Channel, Bay of Biscay**, it accounts for a third of all incidents over the past decade. Thursday is the most frequent day for shipping incidents with Saturday the safest.

Economic pressures impact

While the long-term downward trend in shipping losses is encouraging, the continuing weak global economy, depressed commodity prices and an excess of ships are pressurizing costs and raising safety concerns. **Machinery damage (36%)** is already the most common cause of shipping incidents and preventative measures is often one of the first shipboard expenses to suffer. AGCS has observed an increase in frequency losses over the past 12 months, which, for some classes, can likely be attributed to some extent to the economic environment.

As well as impacting investment in **vessel maintenance and repair, crewing conditions and training, cost pressures** can also impair **passenger ship safety, salvage and rescue and safe cargo carrying**.

It's critical that economic pressures do not allow a "**put it off until later**" safety mentality to develop. Some shipowners are already stretching maintenance to the longest possible intervals, while others are considering laying-up vessels or are already doing so. Vessels which are laid-up for a period of time can return to a market that has moved on technologically. There is a need for standardized layup procedures. Without these, the reactivation of such vessels may result in a "painful" exercise for the industry.

Seafarer shortage, fatigue and training issues

There has been an increase in fatigue-related insurance claims over the past decade. With crew numbers often at their lowest possible level, and with the industry anticipating a future staffing shortage, expectations are for longer shift patterns, which could exacerbate the issue. Meanwhile, training remains below par in some areas, such as with **electronic navigational aids**, which should not be seen as a panacea but as a tool.

Passenger ship safety

Significant concerns remain, particularly around non-international voyages. Some Asian routes are many years behind recognized international standards, as evidenced by a number of recent ferry losses in South East Asian waters. Frequent sailings and profit pressures mean scheduling necessary maintenance can prove challenging.

"Mega ship" salvage challenges

The appetite for ever-larger container ships has seen cargo-carrying capacity of the largest vessels increase by over **70%** over the past decade, to carry 19,000+ containers today. Two "mega ships" were grounded in February 2016, raising safety concerns about what could happen should a more serious incident occur. The industry may need to prepare for a $1bn+ loss in future. There are concerns that commercial pressures in the salvage business have reduced easy access to the salvors required for recovery work on this scale.

Superstorm ship sinkings

Meteorological predictions anticipate more extreme weather conditions, bringing additional safety risks for shipping and potential disruption to supply chains. Hurricanes and bad weather were

contributing factors in at least three of the five largest vessels lost during 2015 including **El Faro**, the worst US commercial maritime disaster in decades. It is also a major factor in South China, Indochina, Indonesia and Philippines being the global loss hotspot. Weather routing will continue to be a critical component to the safe navigation of vessels.

Lower emissions safety threat

The shipping industry has been proactively working to reduce emissions, but there have been unexpected safety implications connected with the use of ultra-low sulfur fuel. Engine problems and power issues have been reported and such incidents could increase as regulations on sulfur content in fuel tighten further. Generally, AGCS has seen an increase in machinery claims in relation to fuel.

Arctic casualties increase

There were **71** reported shipping incidents in Arctic Circle waters during 2015, up 29% year-on-year and the highest in a decade. In 2006 there were just **8** incidents. **Machinery damage/failure (46)** was the cause of **65%** of incidents, driven by the harsh environment. The mandatory Polar Code, expected to enter into force in 2017, will help ensure more responsible shipping in such high-risk waters but safety questions remain.

The cyber threat grows

The maritime industry's reliance on interconnected systems poses risks as well as bringing benefits. Threats can result from improper integration and interaction of cyber systems/updates or attacks from external sources and are not always detected. More needs to be done to educate companies.

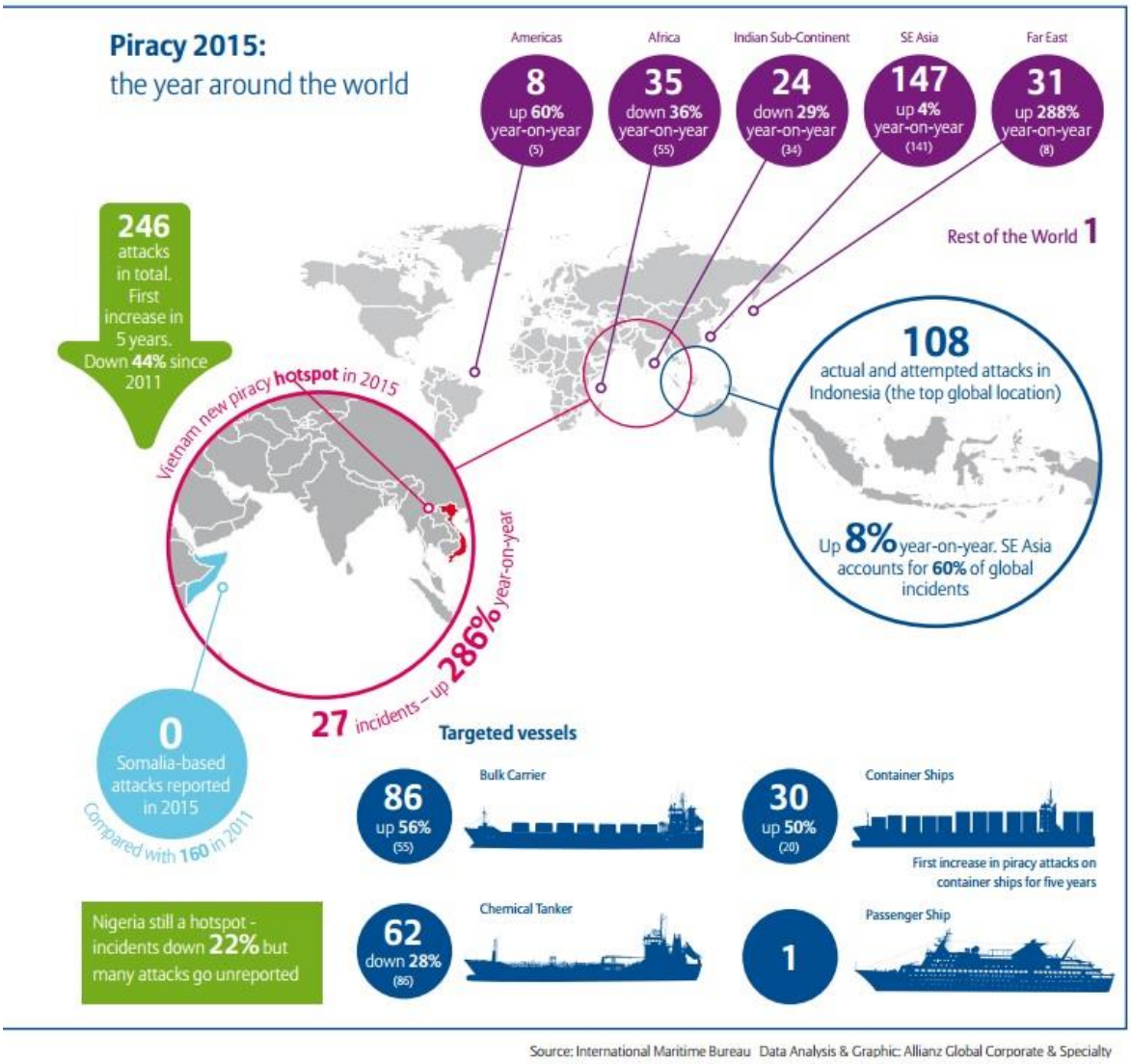
While the likelihood of a cyber event that cuts off a significant portion of trade remains low at present, cyber exposure is growing. Technological advances such as "**The Internet of Things**", allied with increasing reliance on e-navigation, means insurers may have less than five years to prepare for a cyber-attack or incident materializing into a hull and machinery loss.

Piracy evolves as potential cyber risk

There was an increase in the number of piracy attacks **(246)** during 2015. Progress continues in Africa with incidents down in Nigeria and Somalia, although the risk remains high. Attacks in South East Asia continue to increase, with the region accounting for **60%** of global incidents and Vietnam a new hotspot. There are also indications pirates may be abusing holes in cyber security to target specific cargoes. There have already been a number of notable marine-related cyber incidents. The industry needs more robust cyber technology in order to monitor the movement of stolen cargoes.

Other rising concerns include:

- **Supply chain and accumulation risk** in the wake of the **Tianjin** explosion in China in 2015;
- **Cargo risk**, particularly around accurate weighing of containers and shifting cargo (liquefaction) – technological support is needed to test the moisture content of cargoes which can liquefy;
- **Car carrier stability** – in the aftermath of the **Höegh Osaka** grounding incident;Geopolitical instability – in addition to the physical risks, there are operational risks due to unexpected port closures and vessel delays;
- **The return of Iran** to the global shipping stage after easing of sanctions raises safety questions about vessel and port standards in Iranian waters.



SOURCE: Allianz Global Corporate & Specialty

A slowdown in performance of container trade and port activity in Latin America, the Caribbean and the world, 2014-2015

In 2015, global and regional container port activity experienced a slow growth worldwide. The global container throughput grew by only 1.1% in 2015, according to Alphaliner's estimates based on a preliminary survey of over 400 ports worldwide. Last year's global throughput growth logged the second lowest annual growth rate ever recorded for the industry, surpassed only by the record low of 2009 when it declined by -8.4% due to the global financial crisis. Although global GDP grew by 3.1% in 2015 according to the latest IMF estimates, container volume growth grew by less than half of the rate of GDP growth rate – the first time that the global TEU volume growth to GDP multiplier fell below 1X. The latter has been steadily declining over the last 30 years, dropping from an average of 3.4X in the period from 1990-1999 to 2.6X in 2000-2008.

Although the region achieved overall better results, it can be stated that Latin America and the Caribbean's container throughput showed a slowdown in its growth during the last year. This comparative assessment of the performance in 2015 and in 2014, is based on a survey of a representative sample of ports in the region. The results showed a decelerating growth, with a lower expansion of port throughput compared to previous years in some cases and a more dynamic growth in the others. During 2015, the port container movements in Latin America and the Caribbean included in the survey reached an increase of 3.0% more than in 2014. The region's exports declined in value by by 11.6% and the imports by 9.3%. Over this period, the region's economies presented a recession of Gross Domestic product (GDP), declining by 0.4%.

Comparing 2014 and 2015, port activity revealed a growth of container throughput by 3.49%, and the GDP had a lower variation by 3.1%, while the variations of import and export values were even further below in percentage change than the container trade. This reveals a sharp decrease of trade that has been observed in the region during the last five years. It is worth highlighting that in the four years prior to the global economic crisis, container ports experienced an average annual growth of 14.5%, which was almost three times the rate of average change of the economic activity of the region in the same period (5.4%). During the 2010-2014 period, this relation (GDP multiplier) has been slightly reduced - 2.5X – this, in combination with the lower GDP growth of the region (3.6%) explains the downturn in growth rates of container throughput in Latin America and the Caribbean.

SOURCE: Octavio Doerr. Sarah Nunes, Ricardo J Sánchez Unidad de Servicios de Infraestructura, DRNI | CEPAL.

Drone Boats and Drone Cargo Shipping by 2025?

While everyone is talking about flying delivery drones and autonomous cars, there exists a massive opportunity for this same type of technology to be applied to cargo shipping. With 90% of all world trade carried out by the international shipping industry, there are around 55,000 merchant ships carrying cargo around the world right now under the control of around 1.5 million seafarers.

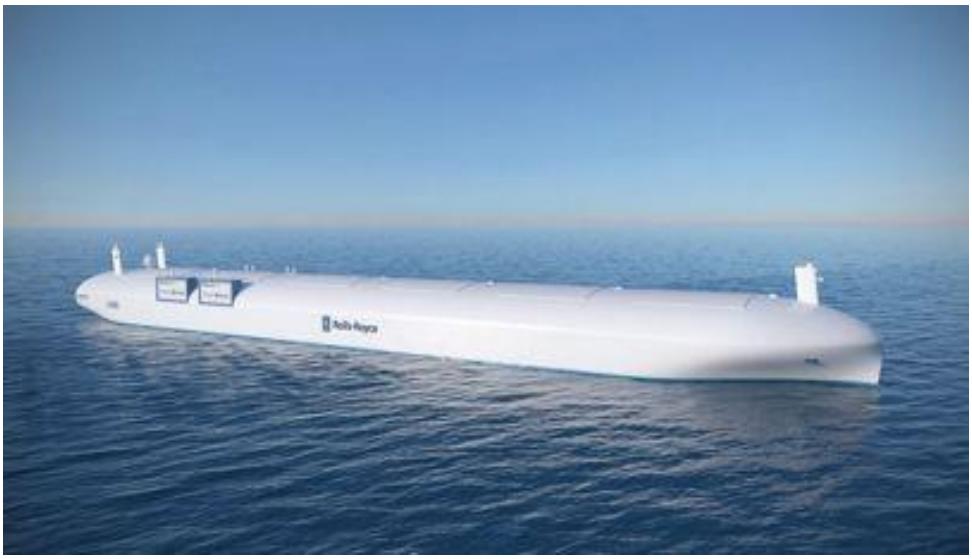
The cost of human labor for the shipping industry to operate is very significant. Let's say each one of those 55,000 ships needs a master mariner (captain essentially) to operate it and the average salary of these captains is $116,000. That's over $6 billion spent a year for just one of the roles needed to operate a ship. Crew costs account for from anywhere between 35-50% of the total cost to operate a container shipping vessel. Clearly drone shipping boats that can navigate themselves would generate some tremendous cost savings.

So in order to achieve drone cargo shipping, we need some basics in place. Firstly, we need to see what is happening on the ship itself, things like propulsion system information, speed, direction, and the movement of the ship itself. This requires massive upgrades to current ships in the form of digitalizing all the ships functions with sensors which will result in one giant set of "big data".

Next, we need for these ships to be able to "see". The ability for computer vision to scan a 360 view of the sea horizon for objects that appear seems easy to do right? But how do you do that when the seas look like this?

And what if the seas looked like that and it was also night time? While the ability to see and identify another vessel visually is important, you wouldn't need to if you just used radar systems which is how most vessels see at night presently. So now that you can see other boats, you then need a way to communicate all this big data back to a central command center that has human operators orchestrating the entire affair. That ability to communicate anywhere is a bottleneck at the moment because you would need relatively high speed, dependable data transfer available anywhere on the open seas.

So is anyone looking at making drone cargo ships a reality? One company that is working on this vision is Rolls Royce (LON:RR). While most people think of Rolls Royce as a company that produces expensive cars for the ultra wealthy, RR also operates in the areas of aircraft engines and marine power propulsion systems. While Rolls Royce has been working on drone cargo ships since 2013, just last year they began work on a $7.5 million project funded by Finland, a country that is aspiring to become "the world leader in maritime remote control technology". Below is a visual depiction from Rolls Royce of what a drone cargo ship might look like:Rolls Royce already has a virtual reality ship's bridge that simulates the 360 view you would see if on board an actual ship. It's not just labor costs that you're cutting by remotely controlling a ship. Rolls Royce believes that by cutting out the infrastructure needed on a vessel to support the ship's crew, you can achieve a 12-15% savings in fuel costs.



Rolls Royce believes that "Ship Intelligence" will be "*the next major transition for the shipping industry as ships are set to become more complex and will require high levels of data analysis to operate on-board systems to manage propulsion, navigation and potentially lead to autonomous vessels*".

Remember the communication bottleneck we talked about earlier? Rolls Royce has solved this by partnering with a company called Inmarsat which plans to provide a new maritime broadband satellite communication system as described below:

"Fleet Xpress will enable the ship-to-shore communications required to support the remote control functionality fundamental to the realisation of the autonomous ship. The high-performance, high-throughput network will open up unlimited possibilities for maritime applications and real-time monitoring and analysis of data, for smarter shipping today and the future."

So how far are we from having drone cargo shipping become a reality? While the study funded by Finland ends next year, Rolls Royce is claiming that their intelligent ship deck will become a reality by 2025 or nine years from now. The below mockup from RR gives you an idea of what that might look like:

At that point in time, the digitization will be in place that enables the remote control of drone cargo ships. The biggest problems (as with autonomous cars) are the legal hurdles. At the present time, unmanned ships are illegal.

So how can investors play this theme? At the moment, there are not a lot of options. You could buy shares of Rolls Royce (LON:RR) since they are a publicly traded company. With the marine business only accounting for around 15% of their total revenues, the question becomes, just how much will this new technology contribute to their bottom line if ever? Companies that are looking to offer cheap satellite internet access anywhere like Richard Branson's "OneWeb" are another way to invest in this theme indirectly. While we don't know when, it's safe to say that if we can clear the regulatory hurdles required to make driverless cars a reality, then drone cargo shipping can't be that far behind.

Looking to buy shares in companies before they IPO? A company called Motif Investing lets you buy pre-IPO shares in companies that are led by JP Morgan. You can open an account with Motif with no deposit required so that you are ready to buy pre-IPO shares when they are offered.

SOURCE: Nanalize - http://www.nanalyze.com/

Big data, small data, and the issue of security

Shipping has come late to the Internet of Things party, but it's catching up fast. What's the latest?

Big data is almost clichéd; the talk now is of small data – only the information that is relevant at the time – and, more crucially, how to protect the storage and flow of information we are gathering.

Gathering data on its own leads to paralysis as opposed to informed action; making sense of data and connecting disparate pieces of data will enable shipping to gain actionable insight. However, decision-makers in shipping are struggling to buy into new forms of insight, which is the reason why they fail to incorporate it into board decisions. Data must be supported by analytics and insight in equal measure.

According to Patrick Thomson at IHS's advanced analytics team, shipping businesses need a new role, a maritime analytics leader, to "combine detailed experience on the quantitative side with detailed expertise on the industry side." Until that role is defined, he said, "the industry will continue to make decisions on the basis that the flaws and discontinuities [in data] are routinely ignored, that the paucity of data is unfailingly accepted, and that the research and forecasts we cling to are biased and opinionated."

Shipping is becoming technology-intensive; beside companies' new maritime analytics leader, whole new digital businesses are expected to be set up, with no assets under ownership but providing operational control. This will require standardised solutions rather than the fragmented technology the industry has grown up with.

Further, as a ship becomes a system of interconnected systems, connected not only to each other but via satellite to a shore-based control centre, the need to provide different levels of protection becomes urgent. Cyber security isn't something to be added to the ship, the experts caution. It must be part of the systems architecture. That will demand new knowledge and skills, new competencies. Cyber security becomes an issue when vessels are controlled from shore rather than just monitored.

The arguments appear strong: fewer people involved will mean fewer accidents, but dealing with incidents that occur at sea will be harder when there are fewer people on board. Vessel maintenance costs will be reduced if there is continuous monitoring of engines and hull structure, yet getting to this stage will require huge investment that can only be achieved with larger fleets and consolidated businesses.

It's important to remember that certain elements of the data-analytics-insight future are already present, informing decision-making, although the more futuristic elements appear beyond the imagination of most people in shipping. However, the flow of data is increasing rapidly, storage is becoming an issue to be addressed, new technological skills are available at energy and automotive businesses, and at propulsion and systems specialists. Understanding the ships of the future begins with advanced engineering in the aviation and communications sectors, and overlaps with them. Training the next generation of engineers alongside the next generation of maritime lawyers and business leaders must begin early, rather than leaving it to the very end.

Working with data, designing new systems, and thinking of the ship in a different way are expected to feature strongly over the next decade.

Source: Richard Clayton, Chief Correspondent, IHS Maritime &Trade

Mega container ships in the wider supply chain

As shipping absorbs ever-larger vessels, supply chain businesses are exploring the challenges

The successful handling of the CMA CGM container ship Benjamin Franklin at both Los Angeles and Long Beach in recent months showed the mega-ship would not necessarily bring new levels of congestion to the industry. Yet not all carriers have been convinced that size is everything. Speaking at the TPM conference, Hapag-Lloyd CEO Rolf Habben-Jansen commented that beneficial cargo owners are not insisting on mega-ships. "Why invest in something that won't cut end to end cost?" he asked.

This is no longer an idle question. IHS Maritime and Trade data shows that four vessels of 14,000-18,000 teu were delivered in 2013, with 14 in 2014, and a further 18 in 2015. Twelve more are expected to be delivered this year, with a peak of 25 in 2017, and 23 in 2018. Given there are a limited number of ports and terminals able to receive these ships and handle as many as 10,000 containers from one call, mega-ships are challenging the very supply chain they were ordered to serve.

The reason for their popularity with carriers is that cost is spread across more units of cargo; one crew, one propulsion system, one hull but two or three times as many boxes as 10 years ago. However, the disadvantage is the pressure placed on land-side operators to get cargo away efficiently before the next mega-ship arrives. They will operate almost exclusively on the east-west routes, especially on the Asia to Europe/Mediterranean services and on the Trans-Pacific, as these terminals have been scrabbling to invest in larger and faster ship-to-shore gantry cranes and rubber-tyred gantry cranes.

A contentious issue for the container business has been the need for shippers to provide carriers with verified weights of both the box and its contents. According to a timetable set by the IMO, all boxes are to be weighed and verified by July 2016. This has caused a great deal of heat but not much light as the deadline approaches. The reason for this regulation is the alleged widespread misdeclaration of container weights, as revealed in various investigations following incidents at sea. This issue is not confined to mega-ships but will affect all container vessels, and all terminals handling containers.

The arrival of larger vessels has also stimulated a surge in investment in new terminals with larger quay cranes, deeper approach channels, and more extensive storage areas. This has driven improvements in handling efficiency, but has challenged logistics businesses at every stage of the supply chain. As ships of 22,000teu are placed on the newbuilding orderbook, and monsters of 25,000teu are on the drawing board, it is more likely that congestion at the terminal and across the supply chain will bring a halt to the race for size than the design criteria or shipyard capability.

Source: Richard Clayton, Chief Correspondent, IHS Maritime &Trade

Rolls-Royce unveils its vision of autonomous shipping

The Rolls-Royce led Advanced Autonomous Waterborne Applications Initiative (AAWA) project unveiled a vision of how remote and autonomous shipping will become a reality, changing the nature of the shipping industry. The project's first year findings were presented at a conference at Helsinki's Finlandia Hall last week.

Mikael Makinen, Rolls-Royce, President – Marine, speaking at the conference said: "Autonomous shipping is the future of the maritime industry. As disruptive as the smart phone, the smart ship will revolutionise the landscape of ship design and operations."

According to Jouni Saarni, Development Manager, Centre for Collaborative Research at the Turku School of Economics: "Remote and autonomous ships have the potential to redefine the maritime industry and the

roles of the players in it with implications for shipping companies, shipbuilders and maritime systems providers, as well as technology companies from other sectors, especially automotive."

Constant real-time remote monitoring of vessels worldwide will see ships become more closely integrated into logistics or supply chains, enabling global companies to focus on using a whole fleet to best effect, generating cost savings and improving revenue generation. This has the potential to create new shipping services, such as online cargo service marketplaces, more efficient pooling and leasing of assets, and new alliances. Some of these services will support existing players in the market and others will be more disruptive – allowing new players to enter and potentially capture a significant share of business in the same way as Uber, Spotify and Airbnb have done in other industries.

According to Jonne Poikonen, Senior Research Fellow, Technology Research Centre at the University of Turku who, with Dr Mika Hyvönen, Senior Research Fellow at Tampere University of Technology, is leading the project's technology research, said: "The technologies needed to make remote and autonomous ships a reality exist – the sensor technology needed is sound and commercially available and the algorithms needed for robust decision support systems – the vessel's 'virtual captain' – are not far away. The challenge is to find the optimum way to combine them cost effectively in a marine environment."

A series of tests of the sensor arrays in a range of operating and climatic conditions will be carried out in Finland in the coming months. Those tests will be on board Finferries 65 metre double ended ferry, the Stella, which operates between Korpo and Houtskär.

The project is also exploring how to combine existing communication technologies in an optimum way for autonomous ship control. It has created a simulated autonomous ship control system which will be connected to a satellite communications link as well as land based systems and will allow the behaviour of the complete communication system to be explored.

To secure regulatory approval, the support of ship owners, operators and seafarers, as well as wider public acceptance, the operation of remote and autonomous ships will obviously need to be at least as safe as existing vessels. According to Risto Jalonen, Senior Research Scientist at Aalto University, who is leading the project's safety strand: "The marine industry has some experience of systematic and comprehensive risk assessments. However, when new or emerging technology is involved a wider and deeper understanding of a new and changed risk portfolio – with a variety of known and unknown hazards – is needed. The AAWA project is identifying and exploring these hazards and developing approaches to tackle them."

Cybersecurity will also be critical to the safe and successful operation of remote and autonomous vessels. The project is identifying and adapting current best practice from a range of industries for application in the marine environment.

The results of such studies will be used to make recommendations to regulators and classification societies to support the development of standards for remote and unmanned vessel operation.

Such rules are vital to the development of remote and autonomous ships according to the project's legal strand leader Dr Henrik Ringbom Adjunct Professor at the Åbo Akademi University in Turku/Finland: "For remote and autonomous shipping to become a reality we need efforts at all regulatory levels. The legal challenges of constructing and operating a demonstration vessel at a national level need to be explored, while simultaneously considering appropriate rule changes at the IMO. Legislation can be changed if there is the political will."

Questions of liability for autonomous ships are subject to national variations, but generally it seems that there is a less urgent need for regulatory change in this field. What also needs to be explored is to what extent other liability rules, such as product liability, would affect traditional rules of maritime liability and insurance. These questions are being studied by researchers at the Faculty of Law at the University of Turku.

The project has been supported by Finnish Funding Agency for Technology and Innovation of Tekes. Rauli Hulkkonen, Tekes, Chief Advisor, said: "This project is a fantastic opportunity to establish the Finnish maritime cluster as the world leader in maritime remote control technology."

The conference also introduced the project's first commercial ship operators; ferry operator Finferries, and dry bulk cargo carriers ESL Shipping Oy. Finferries will assist the project by carrying out a series of tests of sensor arrays in a range of operating and climatic conditions. ESL Shipping Ltd will help the project explore the implications of remote and autonomous ships for the short sea cargo sector.

Closing the conference Oskar Levander, VP of Innovation, Rolls-Royce Marine said: "This is happening. It's not if, it's when. This work supports the development of remote controlled and autonomous vessels and will enable proof of concept demonstration following the completion of the project. We will see a remote controlled ship in commercial use by the end of the decade."

Source: Rolls-Royce