

Shipping in the 21st Century

Preparing the Industry for the Future

Athens - Wednesday, 8 October 2014 Eugenides Foundation



In association with

The "Maria Tsakos" Foundation-International Center of Maritime Research and Tradition, organized in association with Capital Link, a Forum entitled "Shipping in the 21st Century-Preparing the Industry for the Future". The Forum was held on Wednesday, 8 October 2014 at the Eugenides Foundation in Athens. This successful Forum was highly attended; more than 850 participants in addition to a live streaming audience of over 600 people.

FORUM OVERVIEW & OBJECTIVE

The Forum aimed at providing an opportunity, to shipping experts of high calibre from around the world, to examine and analyse the current and future state of the industry amidst the fast political, economic and technological developments experienced on a daily basis.

ORGANIZERS

The Forum was organized by the "Maria Tsakos" Foundation–International Center of Maritime Research and Tradition in association with Capital Link.

Mr. Efthimios E. Mitropoulos, Chairman of the "Maria Tsakos" Foundation, referred to the aims of the Forum explaining that it had been conceived as a one-day meeting to provide an opportunity, to shipping experts from around the world, to examine, analyze and debate the state of the shipping industry, as it stands today and may transform in the foreseeable future amidst the fast economic, financial, geopolitical, technological and environmental developments experienced on an almost daily basis. He added that it was the ambition of the organizers of the Forum to contribute to a better understanding of the various trends and forces that presently shape the industry and those that may influence its state in the years to come; and also how best shipping should prepare itself to be able to face the challenges that come its way every now and then. In his introductory speeches, at the beginning of the morning and afternoon sessions, he made special mentions to seafarers (without whom, shipping could not function), the technological excellence of modern ships and the need to preserve and promote the shipping industry (without which the world trade and economy would collapse).

Mr. Nicolas Bornozis, President of Capital Link, Inc. mentioned that the global shipping industry is currently in a stage of transformation reflecting geopolitical risks, advances in technology, environmental concerns, availability of well-trained seafarers, challenges to maritime safety and security and the evolution of new trade routes. Global economic conditions and political developments affect the demand side, while the size and availability of the global fleet affect the supply side. Imbalances between demand and supply affect asset values, freight rates and earnings. The shipping markets have gradually come back since the severe financial crisis of Q4 2008, albeit still far from their previous highs, creating a sleuth of new challenges and opportunities for shipping companies and investors. As shipping is a capital intensive business, access to capital is a critical factor for survival and success. He described that the US capital markets remain open to shipping companies for equity capital and debt financing, but access to these markets becomes more selective. Investors are mainly looking for companies with a clear and transparent corporate structure, a well defined business strategy and a sizable fleet that creates economies of scale and a competitive advantage in the marketplace. Finally, the profile of the shipowner is also being transformed as more shipping companies become publicly listed and private equity funds and other investors play an increasingly important role as providers of capital and active shareholders.

<u>The morning session</u> was chaired by Mr. Pascal Lamy, former Director-General, World Trade Organization. It dealt with economic, financial, geopolitical and related matters with an impact on the structure of shipping and the shipping market and the workforce that keeps the industry going.

Mr. Pascal Lamy stated during his speech entitled «State of the world economy and International trade»

"Ships have been and will remain the packhorses of globalization. The main shaping factor of the future of shipping is international trade. Although the world economy will grow less rapidly than in the past, its trade intensity, i.e., the volume of international exchange will keep increasing, hence providing shipping with a solid 4% growth path. Within this overall positive prospect, new patterns will appear in trade routes, in technology, in energy efficiency, in



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environmental or social regulations. The mains risks that could affect this scenario are, in decreasing order: geopolitical tensions around critical sea routes, infrastructure bottlenecks, competition policies, protectionism".

<u>The afternoon session</u> was chaired by **Mr. Efthimios E. Mitropoulos**, Chairman of the "Maria Tsakos" Foundation. It dealt with technological developments impacting the design and equipment of ships and matters relating to the marine/atmospheric environment and security (piracy and terrorist attacks) at sea.

MINISTER'S SPEECHES

We would like to thank Mr. Miltiadis Varvitsiotis, Minister of Shipping, Maritime Affairs and the Aegean and Mr. Nikos Dendias and Minister of Development and Competitiveness, for honouring the Forum with their presence and speeches.

Mr. Miltiadis Varvitsiotis stated "As the Ministry of Shipping, the Maritime Affairs and the Aegean, we aim to strengthen the National Greek Registry that currently is not a 'flag of convenience'. In every opportunity and in every way we seek to attract more vessels under the Greek flag. This is our goal, as we possess the capital of the vast experience accumulated in our country from the Greek shipping's everlasting success. This is our goal, as we offer high quality services to shipping eliminating the bureaucratic obstacles and as we participate in all the international Organizations having representatives all over the world. Mainly this is our goal as the central element of our policy is to guarantee the competitiveness of Greek Shipping and of the Greek Seaman.

For us Shipping has a fundamental role and the necessary dynamics to progress even more in the future to formulate the new "National Development Model" of our country".

Mr. Nikos Dendias stated: "The Greek economy is beginning to show very encouraging signs of rebalancing and recovery, due to the sacrifices of the Greek people. The Greek Government is fully engaged in accomplishing all the remaining structural reforms and fiscal adjustments. Greece is successfully transforming itself from a closed economy based on consumption to an open economy, based on exports and foreign investment. New laws and regulations are in the pipeline in order to further cut down the red tape and further speed up investment processes. The Ministry for Development and Competitiveness is currently implementing a new development model aiming to transform Greece into a modern, business friendly and fiscally predictable economic environment. We process and we will very soon deploy an additional set of realistic, targeted regulatory initiatives with measurable effects in order to fully remove bureaucratic obstacles, provide liquidity to the real economy, attract foreign investments and promote Greek exports. The new development model means in practice a shift from the production of non-tradable goods and services to the increase of productivity, competitiveness and the promotion of an export-oriented Greek economy. This development is highly associated with the opportunities for growth that Greece "offers" in key sectors such as the shipping industry. In times of crisis, the maritime entrepreneurship proved to be one of the stable pillars for the Greek economy. The Greek society in general will only have to profit if we manage to create a modern legislative and business environment for the Greek shipping industry. Maria Tsakos's Foundation Forum is a great opportunity for all involved in Greek maritime actors to exchange views on future prospects and challenges".

KEYNOTE ADDRESS

Mr. Noboru Ueda, Chairman and President of ClassNK, delivered a keynote address and stated: "The future of shipping must be "Safer" and "Greener", and the regulations show how to achieve it. The industry needs innovation has given birth to the technologies that enable us to comply with new and challenging regulations.

Now classification societies should become both a better and more proactive partner for the industry and a kick-starter for innovation. There is no end goal in the pursuit of a safer and greener future. To realize constant innovation ClassNK will continue to invest and involve ourselves in progressive R&D with the industry at large".

TOPICS AND PRESENTATIONS

Throughout the day, there were presentations from the following:

Mr. Spyros Polemis, Immediate Past Chairman, International Chamber of Shipping & President, International Shipping Federation, on "**Shipping, The driving force of world trade**", stated that: "Today more than ever, it is no longer possible to do without shipping. We are so interdependent, so inextricably linked the world over, that we need



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shipping to transport goods to markets and to people like never before and what is more, to continue to do it as efficiently and cost-effectively as possible. This task shipping undertakes gladly, but politicians never give it credit for the efficiency with which it operates, much less seek to consult the industry in a meaningful way, on future regulations before positions become entrenched".

Mr. Richard Paniguian, Non-Executive Director, Tsakos Energy Navigation presented on **«Geopolitical developments with an impact on trade and shipping»** and stated that: "Geopolitical impacts on Oil & Gas shipping are not new. However far the development of non-hydrocarbon energy and renewable resources may have advanced, the central part which Oil & Gas play in the lives of us all, and the dimension they occupy at the heart of governments' economic and foreign relations, mean that they are tightly bound up in politics at every turn. The preponderance of maritime exposure in the transportation of Oil and Gas makes shipping a unique risk; this assertion is amply supported by hard evidence. This presentation reviews the evolution of Oil and Gas shipping, identifies the underlying causes of risk and geographical zones of heightened vulnerability, as well as offering a view of the actions which are being taken to mitigate these risks both in terms of closer co-operation between Industry and Governments as well as the application of protective technologies".

Finally, **Mr. Nigel Lowry** of Lloyd's List, the shipping information provider since 1734, spoke about **"The Image of Shipping"** and how its distorted image has negatively affected the industry. Shipping's image problem was two-fold, he suggested: "It has struggled to rid itself of the negative stereotype of an old-fashioned and polluting industry; at the same time it suffered from almost zero recognition among the general public. The key to a better public image for shipping is doubtless the vital overall role it plays in making the world go around, but it should not rest solely on this. That is simply the nature of the shipping business", he said. "The industry's pride should stem from more than this – from excellence in environmental performance, safety and service, and also in proactive social responsibility. Shipping has a good story to tell and we must ensure that it is heard more widely, but it's important that it is based on reality", Lowry said.

DISCUSSION PANELS

A series of panel discussion debated critical industry topics, including:

"Seafarers: Shipping's sine qua non factor"

Moderator: Mr. Michael Grey, London correspondent of BIMCO

"The panel focused very much on the future of the shipping industry and on its dependence on well educated and trained seafarers, both for the increasingly sophisticated and complex ships now coming into service which will produce new levels of efficiency and productivity, but also the shore-side infrastructure, in which there is a continuing need for people with sea experience. We examined some of the challenges facing the industry as it seeks to recruit and more importantly retain its fair share of the available talent, who need to be shown that the sea career is one with an excellent future, within one of the world's most essential industries".

Panellists:

Mr. Philip Wake, Chief Executive, The Nautical Institute - "Seafarers' Education and Training"

"Drawing on input to the Nautical Institute's current Command Seminar series, Mr Wake highlighted recent changes to STCW training and briefly looked at industry self-regulation of specialised training beyond STCW. The Panel explored whether the maritime education and training (MET) systems are able to keep up with the pace of change in the industry whilst maintaining a balance with teaching the core skills still fundamentally required for safe operations".

Professor Stratos Papadimitriou, Department of Maritime Studies, University of Piraeus-"**Preparing shipping's future workforce**"

"One of the major objectives of any educational system is to equip the students with the capacities required to successfully meet the needs of the industry and the employers. This task is getting more challenging today due to a number of factors. The world is changing at a much faster pace and the industry is undergoing substantial transformations. Environmental, technology, safety and security issues are at the forefront of a complex world that intervenes with management, operations, finance and legal issues. Providing the future office work force with the



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essential tools, which would enrich their overall understanding of the world economy and shipping industry while providing them simultaneously with foundation and specialization courses is an objective that is very challenging".

"The state of shipping markets - Future prospects"

Moderator: Mr. Nikolas P. Tsakos, President and CEO, Tsakos Energy Navigation (TEN)

Mr. N. Tsakos chaired the shipping panel. He described the various segments of shipping. From Gas (LNG), which is going through a period of growth, to conventional tankers and the challenges they face in today's environment to the exciting future of cruise ships.

The conclusion from the panelists' presentations was:

- Positive long term prospects for LNG and LPG carriers. A growing market for the future
- Crude carriers have short to medium term encouraging prospects in view of the well balanced supply and demand curve
- Products have been overbuilt and it will take a couple of years to recuperate
- Cruise ships seem to be the most promising segment in view of the growing interest from passengers from the developing world

Panellists:

Mr. Jeremy Penn, CEO, The Baltic Exchange-"The dry cargo market"

"The dry bulk market is in an era of change like no other in recent history and this is set to continue on a number of fronts. The Baltic Exchange is in the process of modernizing its vessel descriptions to reflect the much larger sized vessels which are now standard in the market. It is also changing the routes it reports to reflect the dramatically changing trade patterns. In addition we see for the first time a regulatory interest in the production processes for market benchmarks and even an encroachment from the derivatives market into the physical market via new regulations such as the Market Abuse Regulation. In addition to the traditional investors and lenders as sources of capital there are new flows coming into the industry for good or for ill".

Mr. Lars Dencker Nielsen, President and CEO, Jellicoe Tankers: and Miss Stavroula Betsakou, Head of Tanker Research, ICAP-"The tanker market"

"The product tanker market has sadly become the victim of its own success. Even though global product trade volumes recorded a staggering 12.2% growth year-on-year in 2013, beating even the most bullish expectations, strong deliveries in the MR sector and the large number of LRs switching from the then disappointing dirty trades to the more rewarding clean market capped MR earnings' upside and kept LRs flat year-on-year. More orders were placed with heavy deliveries expected to last up to 2017 due to strong slippage across the board. Meanwhile, the delayed start-ups of new refineries in the Middle East Gulf and India, relatively healthier margins and runs at European refineries due to the Brent contango and slowing global demand are just some of the reasons why this year we expect sub-3% growth in traded volumes. Furthermore, the aggressive strategy switch from Russian refineries towards product exports has taken share off long haul trades into Europe, reducing its tonne-mile demand growth. Looking ahead, demand growth should accelerate from next year led by stronger GDP growth. Imminent changes in trade patterns will back this volume growth up with longer miles as well. Even though the next two years will show conservative growth in earnings – which perhaps may not transpire in round voyage benchmarks but should appear in real earnings - the market should pick up some momentum by late 2016/early 2017. At that time, the recent strong ordering in the crude sector will begin to take effect so the focus will move back to the products sector. Ordering activity will return sooner or later, however we hope it will be at a rate that allows the sector to realise some of its remarkable potential".

Mr. Keith Bainbridge, Managing Director, CS LNG Ltd-"The LNG market"

"LNG shipping is the most important part of the LNG chain as the only reason natural gas is liquefied is to transport it by sea. It is just over 50 years since the first LNG commercial cargo was ship pied from Algeria to the UK and over that time there have been very few incidents and no major accidents on the ships. Now there are over 400 ships afloat and over 120 on order with more growth to come. Traditional production will continue to play an important role as Energy Majors drilling for oil and gas need to monetize the fields in order to effectively 'book' those reserves on their balance sheet. However, the shale oil and gas revolution in the USA has presented an alternative source of LNG which in turn will promote shorter term contracts both for end buyers and for ship charters. The LNG market continues to



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grow but predominantly outside of the OECD zone and most of the emerging markets want gas LNG for power generation: the EU today consumes less energy than 20'years ago! Asia is still an important LNG market but its percentage share will decrease and hence there will be new financial challenges for sellers into the emerging markets. New efficiencies in shipping will impact the LNG shipping sector with larger less fuel consuming new ships but LNG fuel for other shipping sectors is certainly set to grow".

Mr. Tom Strang, Senior Vice President, Marine Operations, Costa Crociere SpA-"The state of the cruise shipping market"

"The cruise industry continues to show strong growth. According to Clia, in 2013 11.82 million North Americans and 6.4 Europeans went on a cruise. The penetration rate is still low compared to the total population: about 3% in NA and 1% in Europe, showing there is still a big potential of growth. In addition there are new emerging markets, like China where Costa was a "pioneer" as the first cruise company to operate cruise for Chinese starting 2007. Next year there will be 3 Costa ships positioned/operating in China. The industry continues to innovate with fantastic new ships like Costa Diadema and products tailored for specific targets like the costa neoCollection".

"Bank shipping finance & capital markets"

Moderator: Mr. Costas Grammenos, Pro-Vice Chancellor, City University London, Deputy Dean, Cass Business School

"Crises bring about changes which could be cyclical or structural. The early 1980s shipping crisis and the Capital Adequacy Rules Basle One had led a large number of banks to abandon the shipping industry and shipowners to get experimentally involved and not so successfully with USA capital markets in the second half of the 1980s and in the 1990s. The high growth in the world trade and shipping markets had strengthened the banks and the capital markets as sources for shipping finance; while the 2008 financial crisis and the Basle Three Capital Rules once more have made a number of banks to get gradually away from the provision of shipping finance; at the same time high yield bonds, public and private equity cropped up as potential sources assisted by Oslo's friendly Stock Exchange, Over the Counter Market and High Yield Bond Market. All these have been important developments. But more important for the strategist will be to figure out which are structural and which are cyclical changes".

Panellists:

Mr. Andy Georgiou, Head of Greek Shipping, The Royal Bank of Scotland

Mr. Nicolas Bornozis, President, Capital Link, Inc.

Mr. Eric H. Schless, Managing Director, Wells Fargo Securities LLC

"Since 2010, Master Limited Partnerships ("MLPs") comprised ~40% of new equity issuance in the shipping sector. MLPs are highly attractive, both to the sponsors that list them and to the investors that buy them. A good candidate for an MLP has a fleet of young vessels under long-term charters to high quality counterparties providing predictability of cash flows, and a large pipeline of vessels that can be acquired by the MLP to drive distribution growth. For investors, MLPs provide a compelling total return value proposition and represent a lower risk way to invest in shipping. High yield and baby bonds also remain a source of capital for shipping companies looking to diversify their capital funding sources".

"The rush for energy efficiency & its impact on ships"

Moderator: Mr. Nick Brown, Marine Chief Operating Officer, Lloyd's Register

LR's Nick Brown commented: "The key issues for improvements in efficiency are understanding the technology, understanding the risks and understanding the impact on costs – both CAPEX and OPEX. LR's role is to help our clients manage risk and realise their potential by helping them make the best commercial decisions based on the best technical insight".

Panellists:

Mr. Stavros Hatzigrigoris, Managing Director, Maran Gas Maritime Inc.

The presentation discussed ideas that could have improved Ship Safety, were discussed in IMO and failed to materialize and present some cases of measures that were taken, caused major upsets but did not in real terms improved anything. Will define what it is thought that Smarter Shipping means. They also discussed recent measures that according to our opinion could improve the emissions signature of ships in the short term.

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Mr. Ioannis Psarros, Project Leader, The Boston Consulting Group

"Recent years have been challenging for maritime shipping companies. Shipping companies need to focus on reducing their biggest cost: bunker. There are multiple levers that can be pulled to improve their performance, including planning, procurement, voyage execution, charter value, technical efficiency, fleet optimization initiatives and enablers such as optimized organizational structures, robust scorecards and KPIs. By following such an approach a company can realize savings of 5 to 10%. Realizing the full potential will require the building of advanced bunker optimization capabilities over time as well as creating a culture of continuous improvement supported by CEO's daily engagement".

Mr. Dragos Rauta, Technical Director, Intertanko

"The business case for success in ship operation is solidly based on three quality pillars: safe operations, environmental performance and high energy efficiency. Mediocre results in any of these are not an option, particularly in the tanker sector. They key to success is depending on the involvement of company's top management who should ensure a professional phase-in process of new, safer and efficient innovative technology and operations. The high prices of marine fuels have prompted significant efforts to improve energy efficiency through design, operations and through improvements of logistics. In this context, the IMO regulation mandating a step wise increase energy efficiency of new buildings is welcomed. There were fears that designing ships against one index will not improve efficiency in operations. Experience indicates that newly delivered ships are indeed more efficient in operations. There still is a lot to learn and to adjust so that the new generation of eco-ships becomes more efficient. It would be natural that IMO prioritises monitoring of results from EEDI compliant ships and, based on actual data, seeks opportunities for improvements on the next generation of new buildings. Unfortunately, there are strong suggestions to divert the attention from new buildings to ships in operations. There are proposals to develop mandatory operational efficiency standards for ships in operations. Maybe this is not such a good idea as it would be an inefficient use of IMO time and resources. Ships do monitor and report their fuel consumptions. Ship operators use the variety of data reported to find ways to minimise ship's fuel consumption. There would be no burden on ships to report to IMO similar data on an annual aggregate basis, as suggested. However, to go a step further and impose a mandatory benchmark for energy efficiency in operation sounds like "mission impossible". It is naïve to believe there could be a scheme or index which could provide a consistent and fair standard. No ship's voyage resembles with the previous and with the next voyage. For obvious reasons, sea trail results of sister ships are not identical. Ignoring such obvious reasons which are cemented into the complexity of ship's operations dictated by the environment, by the nature of the cargo and by the legally imposed commercial obligations, is a key to inefficiency and maybe a key to serious negative impact on shipping at large. Many of existing ships are challenged by the new eco-ships, so there is no better incentive that all ships and ship operators seek to maximize efficiency. Fixing a number as a benchmark of annual fuel consumption based on distance travelled or based on service hours or even cargo carried may add nothing to the strong commercial incentives to improve efficiency but may bring large complications in enforcement and control of such provisions".

"A regulatory update (including air pollution prevention, ballast water management and ship recycling)"

<u>Moderator:</u> Mr. Andreas Chrysostomou, Former Chairman, IMO Marine Environment Protection Committee "Shipping as the main transport mode of the globe for commodities and other vital cargoes have not been immune to the environmental issues of our time and today there area a number of international conventions in relation to the protection of the marine environment which are directly applicable to international shipping.

Although all of the above international conventions are important it is important to mention MARPOL and Ship Recycling as two of the most prominent ones supplemented by the Ballast Water Management convention.

Further shipping is under pressure to reduce its carbon footprint and rules are in preparation to address this in relation to the existing fleet. Shipping is expected to adapt to those needs and we as the shipping community must find the best way possible to adapt without compromising efficiency and safety and also without hampering competition."



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Panellists:

Professor Dinos Arcoumanis, Ambassador of the Hellenic Republic

"Although shipping is undoubtedly the most energy efficient and environmentally friendly mode of transportation, there is increasing pressure for urgent control of both NOx and SOx emissions emitted from marine engines as well as improvement of the overall vessel energy efficiency aiming to reduce CO2 emissions. The relevant regulations are in a different level of maturity, having taken years to reach their present approval or per-approval stage despite their different purpose, goals and costs involved in their implementation. For example, control of SOx emissions is purely a fuel issue aiming to reduce environmental pollution without direct benefits to the industry (except for the attention given to LNG as a propulsion fuel) while NOx emissions are very little dependent on the fuel composition but much more on the fuel/air mixture strength, the peak combustion temperature and engine speed. As such, NOx emissions are intimately related to fuel efficiency, fuel consumption and fuel costs and deserve more attention as they represent a higher % of global NOx emissions than SOx. Additional regulations under discussion and implementation which have more aspirational goals and attracted justifiably more controversy than exhaust emissions include ballast water treatment, ship recycling and more lately shipping in the Arctic".

Dr. John Kokarakis, Vice President, Hellenic Bureau Veritas-"LNG as ships' fuel and the development of the IGF Code"

"Environmental friendliness combined with potential financial benefits on fuel and maintenance bills as well as higher future availability of LNG have started a revolution towards its utilization as a ship fuel in non-LNG carriers. The imminent introduction by IMO of the International Code for Safety for Ships Using Gases or Other Low Flashpoint Fuels, IGF, is expected to remove the uncertain regulatory framework and propel LNG utilization as a propulsion fuel. IGF code is expected to enter into force in 2017 and it aims to preserve the unsurpassable safety record of LNG carriers. Topics on ship construction, design and arrangement, safety, control and monitoring, training and operations are the outcome of many years of hard work by the IMO Sub-Committees".

"Oceans, shipping and the environment - Looking to the future" Moderators:

Dr. Kirsi Tikka, President & COO Europe Division, ABS presented on "New Sea Routes and Their Impact on Shipping and the Environment – The Development of the Polar Code"

"Changing ice conditions in the arctic and shorter shipping distances are the main drivers for increased interest in the Northern Sea Route. Vessel transits and cargo volumes have grown steadily over the past two years and the establishment of the Administration for the Northern Sea Route by Russia, together with new rules and regulations for navigation of the route is promoting more traffic. In addition there is growing commercial interest in using the even more challenging Northwest Passage. As interest in arctic navigation grows, the regulatory regime is developing further with the IMO Polar Code which will become mandatory for all ship operation in polar waters, the Arctic and Antarctic".

Mr. Pascal Lamy, Member of the Global Ocean Commission - "Shipping: A friend of the Oceans"

Mr. Lamy, presented the main findings and recommendations of the Global Ocean Commission (http://www.globaloceancommission.org) and said: "We have to reverse the dangerous degradation of our oceans, which cover 3/4 of the surface of our planet. The shipping industry should engage in lobbying for decisive international action in order to restore the sustainability of its main ecosystem."

Panellist:

Mr. Apostolos Belokas. Managing Editor, GREEN4Sea-"The impact of shale oil and gas production on shipping and the environment"

"Shale oil and gas will be a game changer in shipping due to the fact that gas in contrast with oil cannot be stored for long term. USA the world leader in Shale Oil & Gas production will be forced to export with more than 20 LNG export permits pending in the US Department of Energy. Long term effects to shipping include a boost in LNG transport demand and in the use of LNG as a fuel minimizing the current LNG technology premium and further enhancing the environmental performance of the shipping industry".



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Mr. Diamantis N. Manos, Managing Director, Costamare Shipping-"Ports and offshore terminals: adjusting to the needs of mega ships and related developments"

"Ongoing changes in ship design and deployment, directed by economics of international shipping, triggered fundamental and wide-ranging changes in the development of seaports and offshore terminals. Among port users, container vessels are the most demanding, requiring coordinated actions by ship operators, port authorities, land side transport organizations, regulatory and support agencies. New mega container terminals shall provide efficient hinterland connections through the development of road system, railway system and inland waterway system where applicable, including on deck rail facilities, terminals of inland container barges, IT systems for intermodal transportation and finally dispose the necessary backland storage area".

The Closing speech was made by Captain Panagiotis N. Tsakos, Founder, "Maria Tsakos" Foundation who stated:

"Concluding, I would like to offer some of my thoughts and conclusions for your further consideration.

Firstly, I need to mention that we all need to invest time and effort and to channel our resources towards the one and only priority: the human element, our people, our seafarers, which is indeed the most important asset that we have.

I think that we should all agree that the competence and the seamanship of our seafarers is the key success parameter to ensure a safe and sustainable shipping. Seafaring needs to be a high esteemed profession which should provide job satisfaction, safety and security, open frontiers and a challenging occupation AND ABOVE ALL the feeling that you belong to a family which encompasses all its members with affection, love and devotion irrespective of their nationality and their work onboard or ashore.

Secondly, we need to ensure that our future investments in shipping will be made in a sensible manner so as to ensure the sustainability of our industry. We should also try to include in our considerations and in our research the human element and the interaction of people with the modern equipment and technology that is installed onboard our vessels.

Thirdly, we should continue to work in continually improving the safety and the environmental standards of the shipping. This is not only a legal requirement but also our responsibility, a business need and a society expectation. As a seafarer I feel that I have to express my concern for the ever increasing regulations which increase not only in numbers but also in complexity. I think that it is about time to start considering not only how to adopt new regulations but how to implement practically and effectively the existing ones".

CONCLUSIONS AND RECOMMENDATIONS BY Mr. P. LAMY & Mr. E.E. MITROPOULOS Mr. P. LAMY:

"The main conclusion I draw from this day of fascinating exchanges is the following: getting the balance right between formidable opportunities and real risks will imply collective action of the shipping industry on many fronts. One of the priorities, in my view, would be to engage more with civil society and public opinion who care more and more about ethics, in order to build a more friendly image. Transparency all along the value chain will be key in public perceptions".

Mr. E.E. MITROPOULOS

"The afternoon session of the Forum mainly dealt with technological and environmental matters. Two Greek Government Ministers spoke:

- Mr. Miltiadis Varvitsiotis (Minister of Shipping, Maritime Affairs and the Aegean), who presented the position of Greek shipping within the world trade and economy; and
- Mr. Nicos Dendias (Minister of Development and Competitiveness), who spoke on "Greek shipping and the Greek economy".
- Mr. N. Ueda, Chairman and President, ClassNK, delivered the keynote address on maritime safety matters before the Forum dealt with such issues as:
- 1. The impact of technological developments on shipping;
- 2. The rush for energy efficiency and its impact on ships;
- 3. A regulatory update, including developments in the efforts of the maritime community to reduce greenhouse gas emissions; and



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4. Recent developments relating to oceans, shipping (mainly the opening of the north sea route and the northwest passage), ports and offshore terminals and the environment.

The Forum condemned recently reported malpractices in some parts of the world whereby tankers are held exclusively responsible for damage caused to oil terminals thus being waved of their liability limiting rights".

SPEAKERS VIDEO INTERVIEWS by Mr. John N. Cotzias

Conference Highlights include speakers TV Interviews made by Mr. John N. Cotzias, Director Sales and Purchases at Intermodal Shipbrokers Co., & President of the Hellenic Shipbrokers Association. You can visit the Official Forum's website and the "Maria Tsakos" Foundation website to watch all interviews: http://forums.capitallink.com/tsakos/2014/interviews.php

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ABOUT The "Maria Tsakos" Foundation

The "Maria Tsakos" Foundation (www.mariatsakosfoundation.gr) was founded by Captain Panagiotis N. Tsakos and his family in 2008 and commenced its activities in May 2011, when its Board of Directors and Scientific Council met in inaugural sessions.

The contribution of the Tsakos family to society and culture at large dates back to 1978, when Captain Tsakos founded, in Montevideo of Uruguay, the "Maria Tsakos" Foundation, in honour of, and as a tribute to, his mother Maria. The Foundation, mainly aiming at the promulgation of the Greek language and culture among Latin American countries, is credited with the continuous introduction of Latin Americans into the spirit and universality of Hellenism.



Shipping in the 21st Century

Preparing the Industry for the Future

Capital Link

In association with

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In the Founder's own words: "...the creation of the "Maria Tsakos" Foundation is a small tribute owed to our ancestors – a heritage to this and generations to come, those who will shoulder the heavy legacy of maintaining and disseminating the precious wealth of Greece's perennial cultural contribution to the world."

The Foundation, acting as an International Center of Maritime Research and Tradition, aims at redefining the relation of young Greeks with the sea, amidst the challenges facing today's shipping industry, through the study, research, innovation, documentation, development and generation of original and innovative ideas and propositions. To achieve its objectives, the Foundation seeks co-operation, at the national and international level, with entities active in the fields of shipping, education, culture, environmental protection and maritime tradition. It gradually expands its activities on projects regarding children welfare and philanthropy.

The Foundation has its headquarters on the island of Chios and is housed in a neoclassical building near the port of the capital. The 19th century mansion is associated with milestone events in the history of Chios and linked with prominent families of the island and its maritime history. The Greek State has branded the building as "one requiring special government protection, as it constitutes a unique sample of 19th century architecture", while Europa Nostra has commended it for the excellence of its restoration work.

In its vision statement, the "Maria Tsakos" Foundation expresses profound gratitude for all the sea gives us and the world as a whole; supports the development of a culture of social responsibility, ethical behavior and integrity in shipping; and fosters initiatives with a lasting impact on people's lives through serving the industry while nurturing the notion of volunteerism and supporting philanthropic causes.

In September 2013, the Foundation founded a boarding school (the "Maria's House"), at the Founders' home town of Kardamyla, as an education and culture campus to host promising secondary school pupils from various parts of Greece and to provide them with opportunities to excel in life and career.

ABOUT CAPITAL LINK

With its headquarters in **New York** and presence in **London**, **Athens** and **Oslo**, **Capital Link** (www.capitallink.com) has been active since 1995 in the field of Investor Relations and Financial Communication.

Capitalizing on our in-depth knowledge of the shipping industry and capital markets, Capital Link has made a strategic commitment to the shipping industry and has become the largest provider of Investor Relations and Financial Communications services to international shipping companies listed on the US and European Exchanges.

It also organizes annually in New York, London and Athens a series of Investment Forums focusing on its main activity fields (www.capitallinkforum.com).

It has a leading position globally in the area of investor relations with respect to shipping, cooperating with the majority of shipping companies listed on the U.S. stock exchanges, London (LSE and AIM) and Milan. (www.capitallinkshipping.com).

Capital Link's efforts have been recognized by the **2011 Greek Shipping Lloyds Awards** and in **2012, 2013 and 2014 by Intercontinental Finance Magazine**.

Capital Link has undertaken a series of initiatives beyond the traditional scope of its investor relations activity.