**GST 2014**

Tuesday 18th, Wednesday 19th & Thursday 20th March 2014

Thon Hotel Arena, Oslo

Chairman: Andreas Chrysostomou, Coordinator of Multilateral Affairs.

 Department of Merchant Shipping, Cyprus and President, IMarEST

Day one: Plenary session

08.00 Registration and coffee

09.15 Chairman’s introduction and welcome

09.20 **Welcome address**

 Sturla Henriksen, Director General, Norwegian Shipowners’ Association

09.40 **Opening address**

Markku Mylly, Executive Director, European Maritime Safety Agency (EMSA)

10.00 **Keynote address**

Arsenio A Dominguez, Alternate Representative and Technical Adviser of Panama to the IMO and Chairman-Elect, MEPC 2014

10.20 **The global perspective: The escalating impact of environmental legislation on the shipping**

 **industry**

 David Tongue, Director, Regulatory Affairs, International Chamber of Shipping

11.00 Coffee and networking break

11.40 **SPOTLIGHT PANEL**

**Meeting the 1.1.15 deadline: How prepared is the shipping industry?**

- How will owners and operators comply if they haven’t already?

 - Which sulphur reduction method is the most cost-effective and financially viable and

 why have companies gone for a particular option?

* What is the approximate extra cost/time for each of these cases?
* How does the extra cost for complying with reduced sulphur limits impact on

 commercial operations and charterers’ expectations?

* What is the impact on competitiveness?
* What are the issues for enforcement?

 Robert Ashdown, Secretary General, CLIA Europe

 Tor Øyvind Ask, Fleet Director, Solvang ASA

 Dario Bocchetti, Energy Manager, Technical Department, Grimaldi Group

 Bo Cerup-Simonsen, Vice-President , Maersk Maritime Technology

 Douwe Cunningham, Secretary General, SEA Europe

Roger Strevens, Vice President, Global Head of Environment, Wallenius Wilhelmsen Logistics

Poul Woodall, Director, Environment & Sustainability, DFDS

12.40 Audience feedback and open forum

12.50 Lunch

STREAM 1 ENERGY EFFICIENCY AND OPERATIONS

Chairman: Andreas Chrysostomou, Coordinator of Multilateral Affairs.

 Department of Merchant Shipping, Cyprus and President, IMarEST

14.15 **Energy efficiency best practices and KPIs – experience and lessons learned**

Apostolos Belokas, Principal Consultant & CEO, SQE Marine Group and Managing Editor, *Safety4Sea*

14.40 **Case study of a large container carrier: How retrofitting and operational optimisation can**

 **promote cost effective and efficient ships**

Luke Berry, Commercial Manager, HydrOcean

Martial Claudepierre, Business Development Manager, Envirionmental Services,

Bureau Veritas

15.05 **Today’s challenges of fuel to combustion management**

 Timothy Wilson, Principal Specialist Engineer, FOBAS Services, Lloyd’s Register Group Limited

15.30 Open forum

15.45 Tea and networking breaking

COMPLIANCE WITH WASTE MANAGEMENT REGULATIONS

16.15 **Protecting marine water from ships’ discharges – MARPOL Annex IV and beyond**

 Dr Wei Chen, Head of R&D, Wartsila Water Systems Ltd

16.40 **Case study: Upgrading bilge water systems on vessels delivered 2010-12**

Niclas Karlsson, Managing Director, Clean Ship Scandinavia AB

 Lars Holmberg, Technical Director, Viking Supply Ships AS

17.15 Open forum

17.30 Close of day one

18.30 Departure for Gala Awards Dinner

STREAM 2: PROFILING NEW AND ALTERNATIVE SHIP DESIGNS, ‘ECO’ SHIPS AND MARINE FUELS

Chair: Hanna Lee Behrens, Director, Norwegian Shipowners’ Association

14.15 **Panel debate: Is it a better investment to order newbuild eco ships, buy secondhand or**

 **retrofit with new technology?**

* What is the ROI of a new build ‘eco’ ship?
* Is there a premium?
* Which is easier to finance?
* Will prospects of future fuel availability affect decisions?
* Can ecoships achieve better cost-savings than well-run older vessels?

 Dr Reinhard Lüken, General Managing Director, VSM

 Mark Clintworth, Head of Shipping, European Investment Bank

 Dr Uwe-Carsten Wiebers, Global Head of Shipping, KfW IPEX Bank

 Lanfranco Benedetti, Technical Director, SEA Europe

15.OO **Alternative marine fuels: Preparing for the future**

 Speaker: Christos Chryssakis, Senior Researcher, DNV GL

Authors:

Kjersti Aalbu, Consultant, Océane Balland, Consultant, Christos Chryssakis, Senior Researcher, Magnus Strandmyr Eide, Principal Consultant, Tore Longva, Business Development Manager, DNV GL

15.25 **Battery powered ships – a new green business case?**

Narve Mjøs, Director Battery Projects, DNV GL

 Co-author: Joachim Amland, Consultant, Environment and Energy Efficiency, DNV GL

15.50 Tea and networking break

16.15 **Case study: Installing alternative energy sources aboard a Scandlines hybrid ferry**

Brent Perry, CEO, Corvus Energy

 Fini Alsted Hansen, Fleet Management, Technical Superintendent, Scandlines Danmark a/s

16.40 **An overview of energy saving technologies**

 Dr Tristan Smith, Lecturer in Energy and Transport, UCL Energy Institute

17.05 **Case study: Kites as wind propulsion for ships - Update on the joint project of Cargill and SkySails**

Capt Jonathan R Stoneley, Environment & Compliance Manager, Cargill – Ocean Transportation

 Stephan Wrage, Managing Director, SkySails GmbH

17.30 Open forum and discussion

17.45 Close of day one

18.30 Departure for GST Awards and Gala Dinner

Day two: Wednesday 19th March 2014

08.00 **Breakfast briefing 1: Fuel availability in ECAs: Price and economics forecast for future**

 **demand**

Peter Stewart, Chief Energy Analyst, Interfax Global Energy Services

08.00 **Breakfast briefing 2: Energy saving through simulation of the energy grid:**  Rolf Nagel, Manager Research and Development, Flensburger

 Schiffbau Gesellschaft mBH & CO KG

 Markus Lehne, Managing Partner, BALance Technology Consulting

09.00 Welcome coffee

STREAM 1: MANAGING EMISSIONS TO AIR

Chairman: Andreas Chrysostomou, Coordinator of Multilateral Affairs.

 Department of Merchant Shipping, Cyprus and President, IMarEST

09.15 **California experience with fuel switching for emissions control since 2009**

Capt Jeff Cowan, Oil Spill Prevention Specialist, Office of Oil Spill Prevention and Response, California Dept of Fish & Wildlife

09.40 **Development of a CO2 based waste heat recovery system for ships**

Speaker: Dr Eric Maxeiner, Senior Systems Engineer, Echogen Power Systems

Authors:

Sean Arnold, Marine Program Manager, Echogen Power Systems

Read Tuddenham, Director of Marine Applications Engineering, GE Marine

10.05 **Case study: tanker newbuilding with 10 exhaust sources integrated in one single scrubber**

              Nils Høy Petersen, CEO, Clean Marine

 Pia Meling, Sales & Marketing Manager, Clean Marine

10.30 **Best practice for exhaust gas scrubbers: Minimising risk and maximising safety**

Fabian Kock, Head of Department, Environmental Certification, DNV GL

Markus Osterkamp, Emission Expert, Environmental Certification, DNV GL

10.55 Open forum and discussion

11.15 Coffee and networking break

THE LNG OPTION FOR OPERATING IN ECAS

11.45 **LNG as a bunker fuel: Costs of operating LNG fuelled vessels**

 David Bull, Senior Consultant, Maritime & Waterways, Ocean Shipping Consultants

12.05 **Case study: Converting the *MV Ostfriesland* to gas as fuel**

Benjamin Scholz, Ship Type Expert Liquefied Gas Carrier, DNV GL

12.30 Lunch

13.45 **Regulatory landscape: making safe LNG operation and bunkering possible**

Dr Paul Davies, Technical Manager, Risk Assessment, Lloyd’s Register Group Limited

14.10 **Panel Debate: No longer in the future but becoming a reality, what is the infrastructure**

 **readiness now for LNG-fuelled vessels ?**

 Moderator: Dragos Rauta, Technical Director, INTERTANKO

 Panellists will include:

 David Bull, Senior Consultant, Maritime & Waterways, Ocean Shipping Consultants

 Fer van der Laar, ESI Administrator, WPCI

 Representative, SSPA Sweden AB

14.50 **Technology incubator**

 Concise, to-the-point presentations from providers of new and innovative technology, with

 the opportunity for the audience to ask questions and discuss each technology

15.20 Tea and networking break

15.40 **Technology incubator continued**

16.40 **Champagne problem solving clinics**

17.40 Close of day 2 and networking drinks reception

Stream 2: BALLAST WATER MANAGEMENT: UNDERSTANDING THE LATEST REGULATIONS AND FORMULATING STRATEGIES TO COPE

Chairman: Craig Eason, Technical Editor, *Lloyd’s List*

09.15 Chair’s introduction

09.25 **Operational and safety concerns of ballast water management systems (BWMSs)**

 Debra DiCianna, Senior Environmental Solutions Engineer, ABS

09.50 **US regulatory requirements: The latest guidance and timetable**

10.15 **UV technologies struggling with US regulations**

 Stephanie Delacroix, Project Leader, Ballast Water Treatment Testing, NIVA

10.40 Open forum and discussion

10.55 Coffee and networking break

11.25 **Testing for functionality or efficacy? How do shipowners know the systems will work?**

 Tim Fileman, Business Development Manager, Plymouth Marine Laboratory & PML

Applications Ltd

12.00 **Panel discussion: Alternative options for compliance with the BWM Convention: Technical and economic considerations and potential exemptions**

- What are the alternative options?

 - Are these practical from a technical and commercial point of view

 - Will there be exemptions for niche trades?

Introduction: Peter Catchpole, Principal Specialist, Environment Department, Lloyd’s Register Group Limited

12.30 Lunch

EXAMINING RETROFITTING OPTIONS, FINANCE AND ECONOMICS

Chairman: Matthias Plötzke,Director Environmental Protection, German Shipowners’

 Association

13.45 **Panel debate: What are the technical and financial impacts of fitting new technologies?**

- Funding for fitting new technologies: Investigating the options:

- Ballast water treatment technologies

- Emission control systems

- Energy efficiency solutions: Hull and propeller modifications

- Technical impacts of retrofitting new technology

 Mark Clintworth, Head of Shipping, European Investment Bank

 Geir Høibye, Special Adviser, The Business Sector’s NOx Fund

Capt Jonathan R Stoneley, Environment & Compliance Manager, Cargill – Ocean Transportation

14.25 **Case study: Energy efficiency retrofitting for large tankers: Can a low performing vessel**

 **be changed into best in class?**

Maarten Nijland, Naval Architect, Maersk Maritime Technology

14.50 **Case study: The shipowner’s experience of installing scrubbers**  **on a fleet**

 Poul Woodall, Director, Environment & Sustainability, DFDS

15.20 Tea and networking break

15.40 **Poster exhibition**

 Attendees have the opportunity to visit the poster exhibition and hear from the authors

 about their particular project

16.40 **Champagne problem solving clinics:**

1. **Unleashing the potential in new hull coating technologies**

Led by: Geir Axel Oftedahl, Director of Business Development, Jotun Hull

 Performance Solutions & Project Leader ISO 19030

1. **The human factor: the critical element in management of environmental**

**performance**

Led by: Dimitris Argyros, Environmental Department, Lloyd’s Register Group Limited 3.  **The NOx regulations: How to comply with Tier III requirements**

Led by:

 Albert Leyson, Marketing Manager, Drew Marine USA Inc

Jens Bechu, Strategic Industry Manager, Combustion Engines & Maritime Applications, Sick AG

Dr Joseph M McCarney, Business Development Manager, Johnson Matthey

 Jens Gørtz, LEE4 Marine Installation, MAN Diesel & Turbo

4. **Underwater noise: The next big marine environmental issue?**

Led by Alexis Rudd, Cushing Marine Policy Fellow, Consortium for Ocean Leadership, University of Hawaii

 5.  **EEDI requirements and minimum installed power: evaluating the potential conflicts**

17.15 Close of day two and networking drinks reception

Day three: Thursday 20th March 2014

08.00 **Breakfast briefing 1: Scenarios for future ship emissions in the North Sea**

Dr Volker Matthias, Clean North Sea Shipping & Helmholtz-Zentrum Geesthacht

08.00 **Breakfast briefing 2: Leading fuel efficient ship solutions – innovation in practice**

 Konstantinos Fakiolas, Sales Director, Marine, Deltamarin Ltd

08.50 Welcome coffee

PLENARY: MONITORING, REPORTING AND VERIFICATION: THE PRACTICAL IMPLICATIONS

Chairman: Andreas Chrysostomou, Coordinator of Multilateral Affairs.

 Department of Merchant Shipping, Cyprus and President, IMarEST

09.10 **The European Commission view: Latest update on Commission proposals**

 Heiko Kunst, Policy Coordination Officer, DG Climate Action, European Commission

09.35 **Case study**: **Results from recent reviews and tests of MRV: Practical implications**

Hans Otto Kristensen, Senior Adviser, Nautical Department,

Danish Shipowners’ Association

10.00 **The owner’s viewpoint after the review of MRV**

Lars Lundegaard, Senior Vice President, Dampskibsselskabet "NORDEN" A/S

10.25 **Energy study of the Belgian fleet: Comparisons and predictions**

Ludovic Laffineur, Environmental Policy Adviser, Royal Belgian Shipowners’ Association

10.50 Coffee and networking break

11.15 **A voluntary initiative for a lower carbon shipping industry - presentation of The FRAM**

 **project**

 Capt. Filip Svensson, Vice President Marine Operations, Wilh Wilhelmsen ASA

11.40 **MRV concepts: A class view of verification of data**

Torsten Mundt, Manager, Environmental Research, DNV GL

12.10 **Panel Debate: Does the panel believe MRV proposals can achieve the intended goal?**

Moderator: Tor Christian Sletner, Head of Section, Norwegian Shipowners’ Association

 **P**anellists:

David Tongue, Director of Regulatory Affairs, International Chamber of Shipping

 Dragos Rauta, Technical Director, INTERTANKO

Svend Søyland, International Adviser, Bellona Foundation

 Sveinung Oftedal, Senior Adviser, Ministry of the Environment, Norway

12.45 Open forum

13.00 Lunch

14.15 AFTERNOON WORKSHOPS

1. **Enhancement of energy efficiency in ship operations – experiences and new ways ahead**
* How to align incentives for ship-owners, ship-managers and ship-operators to enhance on energy efficiency?
* How to tailor shipping company organisations to enhance energy efficiency?
* How to use crewing and maritime human resource management to enhance energy efficiency?
* How to update and improve maritime education in order to enhance energy efficiency?

Panellists:

René Taudal Poulsen, Associate Professor, PhD, Copenhagen Business School

Michael Steenfeldt, Director of Operations, Copenship A/S

Michael Schmidt, Naval Architect and Owner, Schmidt Maritime ApS

 Ingrid Marie Vincent Andersen, PhD Fellow, Technical University of Denmark

Steen Sander Jacobsen, Fuel Optimization Manager, Maersk Tankers

Signe Jensen, Associate professor, Svendborg International Maritime Academy

1. **Offshore support vessels: Management of energy efficiency and environmental requirements**
* The Energy Efficiency Offshore Partners’ Project (EEOP) : progress and developments
* Optimising offshore support vessels for maximum efficiency
* Impact of environmental regulations on the OSV sector
* Retrofitting green technology on OSVs: What are the energy efficiency implications?

Knut Ljungberg, Principal Consultant, DNV GL

Helge Såtendal, Marine Operations, Statoil

3. **Working group on hull and propeller performance standard
 -** Developing the draft ISO Standard: Reliable and Transparent Hull and Propeller Performance

 Measurement Standard
 - Measuring changes in hull and propeller performance
 - Methodology and data requirements

Svend Søyland, International Adviser, Bellona Foundation
Geir Axel Oftedahl, Director of Business Development, Jotun Hull Performance
 Solutions & Project Leader ISO 19030

4. **Designing for optimum fuel efficiency**

 Led by: FORCE Technology

16.30 Close of conference