BULK TERMINALS 2019 THE ONLY EVENT AIMED AT THE ENTIRE BULK TERMINALS INDUSTRY

The Annual Association of Bulk Terminal Operators Conference

8-9 October 2019, Mövenpick Hotel Amsterdam City Centre, The Netherlands



Professor Mike Bradley

The Wolfson Centre

Dr Penelope Cooke

Brookes Bell

Captain Richard Brough OBE

Brough Marine and ICHCA International

Fergal Buttimer

Buttimer Engineering Group

Anthony van der Hoest

MTBS

Garry O'Malley

Redcar Bulk Terminal

Peter Göransson

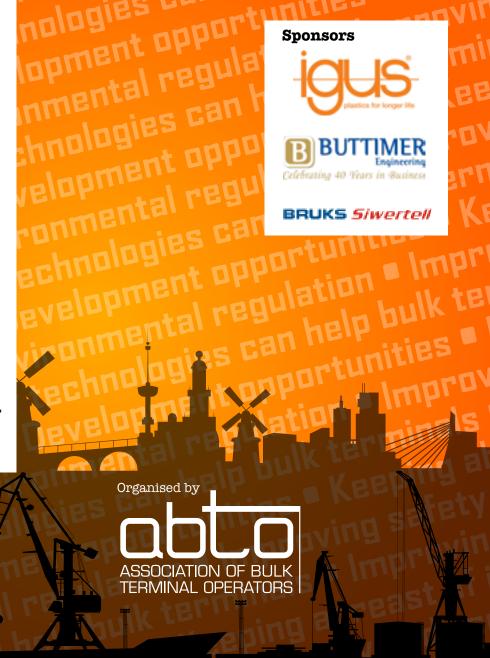
Siwertell AB

Javier Quintero Saavedra

ICHCA International and Terminales Maritimos de Galicia

Jeppe Skovbakke Juhl

BIMCO



Supporting Organisations



















Media Partners















BULK TERMINALS 2019 MAXIMISING OPERATIONAL EFFICIENCIES AND ADAPTING TO CHANGE

8-9 October 2019, Mövenpick Hotel Amsterdam City Centre, The Netherlands

RISE TO THE CHALLENGE OF MAXIMISING YOUR **OPERATIONAL EFFICIENCIES**

The annual conference traditionally opens with a strategic look at the markets that drive everything. This year, we are expanding our coverage in this session to look at international opportunities and the finance to focus on investment.

Meanwhile, the session ACHIEVING OPERATIONAL EFFICIENCIES & ADAPTING TO CHANGE starts with an inspirational case study of how a terminal turned its fortunes round after losing a customer representing 95% of their throughput. Data and software help provide the solutions to achieving operational efficiencies - and not least to getting it right at the terminal design stage.

Bulk Terminals 2019 continues the focus on issues that bulk terminal operators tell us they most want to understand and discover solutions for: maximising operational efficiencies; keeping abreast of environmental regulation; improving safety - and how software and technologies can help them achieve these objectives.

Stevedore safety continues to be a top priority and we will examine issues ranging from fumigation and CO2 hazards to collision avoidance. The environment and GHG emissions continue to move steadily up the agenda: what should the terminals' attitude be to scrubbers, in which a significant percentage of the merchant fleet have invested?

Dry bulk terminals lag behind their liquid bulk cousins in marketing themselves. **NEW** for Bulk Terminals 2019 will be an interactive Marketing and Branding WORKSHOP, to learn and practice the techniques to promote your terminal effectively.

With operator CASE STUDIES, a WORKSHOP and panel of EXPERT SPEAKERS providing insight, advice, solutions and networking, Bulk Terminals 2019 is the only event all those involved in the transportation, storage and handling of bulk commodities need to attend. We are looking forward to meeting you all in Amsterdam.

Simon Gutteridge, Chief Executive, and the ABTO Team

"Great conference, good programme and networking – met some useful people.

Looking forward to the next event" Fergal Buttimer, CEO, Buttimer Engineering

KEY TOPICS INCLUDE:

- Prospects for the dry bulk market in 2020 and beyond
- Adapting to survive operator case study
- Optimisation of bulk terminal operations using terminal operating software
- Bulk terminal design tools using big data
- Preservation of cargo quality through the handling chain
- Fire and explosions the continuing challenge
- Sustainability and GHG update

WHY ATTEND?

- Understand the challenges the bulk terminal industry faces
- Learn from the experts
- Appreciate the needs of your customers
- Enjoy invaluable networking opportunities with industry peers, consultants and investors
- Meet technology suppliers and find out how they can improve your compliance and efficiency

WHO SHOULD ATTEND?

BULK TERMINALS 2019 is the essential event for operational and technical directors, managers, business development and analysts from:

- Bulk terminal operators
- Port authorities
- Mining companies, commodity producers and traders
- Ship owners, operators, charterers, managers and barge companies
- Logistics, brokers and forwarders
- Materials handling engineers
- Equipment and service providers
- Government and regulators
- Terminal developers and EPC
- Ports and construction consultants
- Finance
- Insurance and P&I
- Lawyers





SPONSORSHIP AND EXHIBITION OPPORTUNITIES

BE INVOLVED AS A PARTNER

Attending this event as a partner - exhibiting or sponsoring - will give you the opportunity to showcase your technologies, services, solutions and products to some of the most respected leaders in the bulk terminals industry. It's the ideal way to enhance your company profile and communicate effectively with your target audience.

BENEFITS OF SPONSORING

- » Increase awareness of your product or service
- » Showcase your product or service to potential buyers
- » Benefit from greater market exposure to key purchasing influencers

PROGRAMME DAY ONE



00	AY 8 OCTOBER 2019 - CONFERENCE DAY ONE
08:15	Registration and refreshments
PENING	SESSION
09:00	Conference Chairman's opening remarks Ian Adams CDir, FIoD, IEng, FIMarEST, Technical Advisor, Association of Bulk Terminal Operators (ABTO)
09:05	Official welcome from the Port of Amsterdam Femke Brenninkmeijer, Director Energy, Cargo and Off-Shore, Port of Amsterdam Authority
ESSION	ONE: MARKETS AND OPPORTUNITIES
	CHAIRMAN – Captain Richard Brough OBE , Head of ICHCA nal and Director, Brough Marine Limited
09:10	Prospects for the dry bulk market in 2020 and beyond The dry bulk markets have been rocked in recent months by a series of disruptions to demand, including Vale's Bumandinho dam disaster, US-China tariff wars and changing government policy on coal trade. Some disruptions are temporary, but others hint at structural changes to the bulker market that will have long term ramifications for the types of cargoes traded and ships required in the future. » Outlining key structural changes and future trends for dry bulk commodity trade flows » Quantifying major medium-term market risks » Impact analysis: which segments are best placed to benefit? Will Fray BEng (Hons), CQF, Dry Bulk Analyst, Maritime Strategies International (MSI)
09:40	Transactions in bulk terminals — opportunities in Europe and beyond M&A activity in the dry bulk and breakbulk terminals has increased over the past few years with the sale of portfolios such as HES and EUROPORTS, but also individual terminals in the region such as OVET and SCA INTERFOREST. What is the rationale in investing in these terminals and how to capitalize on the current potential opportunities in the M&A market. » Why invest in dry bulk and breakbulk terminals? What is the rationale for investments? » How to optimise the business case and ensure maximum returns » M&A prospects in dry bulk terminals. Anthony van der Hoest, Director Commerce, MTBS
10:10	Current trends and challenges for transport finance Although a few major container terminal transactions have made headlines this year, there has been much more activity with small and regional terminals, as demand for financing is strong. Institutional investors are flush with money and in an environment of low interest rates infrastructure projects are highly in demand, as yield investments become more attractive. Despite uncertainty for a softening economic environment worldwide and tariffs and trade wars in a weak overall shipping environment, bulk terminals can be relatively insulated by global macro-economic factors — and this is of continuous interest to investors. » Strong demand by financiers for infrastructure projects, including ports and terminals » Demand based on fundamentals rather than speculation gets more attention and represents better economics » Regional dry bulk terminals get attention too, not just large containership terminals that grab the headlines » World trade will not come to an end any time soon, tariffs notwithstanding
	Basil M. Karatzas FICS, ASA, CEO, Karatzas Marine Advisors & Co
10:40	DISCUSSION
	Refreshments
11:05	Hett canmenta

SESSION T	WO: ACHIEVING OPERATIONAL EFFICIENCIES & ADAPTING E
SESSION CI	HAIRMAN – Captain Richard Brough OBE
11:30	case study: Redcar Bulk Terminal – life after coal and steel making The ongoing transformation of a former pure bulk import terminal for iron ore and coal into a multi user, multi products bulk import and export port facility and the challenges faced during this journey. Many of these challenges were complex by nature as the existing terminal handling equipment and personnel had to adapt to the differing characteristics of the variety of new products being handled for a number of port users with different quality requirements. » Carbon Tax introduced in April 2015 – subsequent fall in steam coal imports into UK ports as energy providers looked to alternative fuels such as biomass » Closure of the Redcar steelworks in October 2015 resulted in the loss of 95% of terminal throughput » Restructuring, training, consolidation and diversification » Adapting to survive and investing for the future Garry O'Malley, Director, Redcar Bulk Terminal Limited
12:00	Operational efficiency in ports The adjustment of a ship's speed to meet a predetermined arrival time is a form of emissions' management and is being widely discussed. The reduction in time spent waiting at a congested port resulting from a reduction in speed reduces a ship's fuel consumption generates financial gains for operators and charterers. It also reduces greenhouse gas emissions, which benefits the environment. The different methods of communication and exchange of data will be key to the success of operational efficiency. » Operational efficiency from the ship's perspective » Smarter communication and reducing port congestions » Alignment of data models and transfer of data between ship and shore Jeppe Skovbakke Juhl, Manager, Maritime Technology & Regulation, BIMCO
12:30	Optimisation of bulk terminal operations using terminal operating software The dry bulk terminal world is not just about large, single mode mineral terminals. There are many diverse, opportunistic small terminals trying to win business, but at low margins on short term contracts handling and processing multiple commodities. "The typical system landscape at bulk terminals How systems can reduce complexity and administrative costs plus improve operational efficiency using such methods as EDI, auto upload, customer data entry, mobile users and interfaces with gate, weighing systems and cranes How real time data capture ensures that all chargeable services are invoiced David Trueman, Managing Director, TBA Doncaster Ltd
13:00	DISCUSSION

"It was certainly a very good experience for me to be part of the ABTO conference. I met a lot of very interesting people from different sectors and believe me it exceeded all my expectations" Michael Gubbins, Logistic Optimization Vice President, CODELCO -

Corporación Nacional del Cobre de Chile

13:20

Lunch

PROGRAMME DAY ONE (CONTINUED)



Bulk terminal design tools using big data Much in terminal design is about performance in terms of a vessel's total time in port. Using simulation at the design stage helps to better predict the performance of terminals. However, simulation is all about input. The development of tools to harvest big data helps to better define and benchmark various factors that contribute to the total time in port, such as weather downtime, waiting time, etc. » The role of design in terminal performance » The importance of input to accurate simulation » Factors that contribute to time in port » Examples of tools to harvest big data that help to design better bulk terminals Ekke Oosterhuis, Materials Handling & Logistics Consultant, Royal

14:20

14:50

15:20

HaskoningDHV

Robust 3D inventory volumetric control: stockpile, surge bins and shiploader hull

Radar technology has been used in the marine industry for 100 years. Over the past 10 years the technology, including high resolution 3D scanning, has advanced allowing for use in ports and mines. Radar has the advantage of being independent of the weather. Robust sensors allow scanning bulk with centimetre precision in real time, facilitating process digitalisation and automation. The presentation will outline case studies from ultra dusty stockpiles in the Atacama Desert, train load out stations in the hot Pilbara iron ore region, to vessel loading at the rainy West Coast of Canada. Applications realised apply along the entire volume flow chain from mine to port to plant.

- » Radar technology as a key technology to scan bulk surfaces
- » Enables safety and automation in material handling and de-bottlenecking
- » Technology driver for productivity in remote control and automation **Dr Reik Winkel** MBA, Technical Director, indurad GmbH

Quality issues in handling dry bulk cargoes

All cargoes are subject to standards for acceptability; careless handling can compromise the acceptability of materials due to loss of quality. Equally, the use of inadequate sampling methods can cause misrepresentation of the measured quality parameters. The likelihood of quality loss and the causes are not always obvious, so this presentation will seek to shine a light on the key range of different quality issues that need to be examined in dry bulk cargoes, means for avoiding compromise of quality and sound means for evaluating it.

- » Common issues in cargo quality: water damage, size segregation, caking, particle breakage
- » Causes of the above and means for overcoming them
- » Good practice in sampling

Professor Mike Bradley BSc Hons, PhD, Director, The Wolfson Centre for Bulk Solids Handling Technology, University of Greenwich and Chairman, Solids Handling and Processing Association

	Chairman, Solids Handling and Processing
15:50	DISCUSSION
16:00	Refreshments

SESSION THREE: BIOSECURITY

16:30

17:00

17:30

SESSION CHAIRMAN - Professor Mike Bradley

CASE STUDIES: Cargo damage and infestations in bulk shipments Any infestation claims associated with a bulk shipment of grain products often involve large amounts of money and a 'throwing hands in the air' approach to managing the situation. Poorly sampled product generates unreliable analytical results, but is very tempting when faced with a hold full of product of several thousand tonnes — why not just "scoop" off the top? Sampling during discharge is often the only way to establish the extent of any infestation, but there may then need to be further fumigation of the product once in the warehouse storage.

- » Fumigation expectations will it kill everything every time?
 » Representative sampling and the need to understand how to measure an infestation
- » Identifying the source of the infestation it is easy to blame the ship...

Dr Penelope Cooke, Managing Scientist, Brookes Bell

Fumigation of shoreside facilities

The presentation addresses the fumigation of cargoes stored in discharging ports' facilities, drawing on our experience of flat silos affected by borer insects — ex pupae and larvae — present inside grain kernels. Even though the consignments were subject to intransit fumigation, pupae and larvae inside the kernels grew into borer insects while the cargo was in storage. Consignees fumigated the cargo but insects continued to plague silo walls which had to be thoroughly cleaned and fumigated when empty. The walls' smoothness had to be restored to reduce the infestation of further consignments. H&S was an issue with fumigant leaking to adjacent silos.

- » Effects of in transit fumigation
 - » Dangers of leakage to adjacent storage
 - » Precautions to take

DISCUSSION

Javier Quintero Saavedra CMIOSH, Chairman, Dry Bulk Cargoes Working Group, ICHCA International and Head of HSE, Terminales Maritimos de Galicia

17:40	Close of Day One
18.00	Depart for a tour of Amsterdam's Canals and Conference Reception on board the historic Friesland barge Anna Maria

"The sessions were very pertinent to our business and the subject matter wide ranging... which for a Bulk Terminal operator with multiple cargoes was very informative to me. I would certainly recommend... and plan to ensure Solent Stevedores attend future events"



PROGRAMME DAY TWO



08:30	SDAY 9 OCTOBER 2019 - CONFERENCE DAY TWO Registration and refreshments		Dealing with emissions when handling bulk commodities With ever-increasing pressure on port operations to deliver greener bulk cargo handling, this presentation will discuss the					
09:00	Conference Chairman's opening remarks		various methods around dust suppression and emissions during					
VORKSHO	OP:	11:50	bulk unloading. » Environmental ship unloading: hoppers versus					
IARKET	ING AND BRANDING BULK TERMINALS		standard configuration					
	P LEADERS: Ian Mills, Director, Lawrence Mills Consulting and ien, Managing Director, Sowden & Sowden		» Considerations to be placed around the various bulk commodities » Methods to reduce dust pollution to achieve greener, cleaner ports Fergal Buttimer, CEO, Buttimer Engineering Group					
	Last year, Ian Mills spoke about what a brand is and why it's important for the success of your terminal. Marketing, however, is a	12:00	DISCUSSION					
	dynamic, creative topic and, while textbooks will tell you what to do,		TWO: TERMINAL SAFETY					
	the "doing" is a creative process, unique to you and your terminal. This year, he has enlisted the advice of a colleague, Paul Sowden, who		CHAIRMAN – Captain Richard Brough OBE					
09:05	runs a marketing agency and is actively involved in creating and	DEDDION	CASE STUDIES: Liquefation – management of people					
	developing brands. Together, they will run an interactive workshop that will engage you, make you thing about yours and your competitors' marketing and get you to start to develop brand themes that you can take away to develop further.		and expectations The implementation of the mandatory IMSBC Code requires cooperation between shippers, ports and terminals and ship operation—often with very different expectations and timescales. Obtaining representative samples and being able to have these analysed on timescales set by the Code need to be considered and may need to					
10:30	Refreshments							
ESSION	ONE: ENVIRONMENT AND SUSTAINABILITY	12:10	incorporated into terminal standard operating procedures. » Land sea interactions and expectations – the BLU Code and the					
SESSION (CHAIRMAN – Professor Mike Bradley		IMSBC Code					
	Sustainability and GHG update The world is rightly concerned with the effects of climate change and ozone depletion. The International Maritime Organisation has turned significant attention on the shipping sector by agreeing significant stepped reductions in emissions from vessels. Some say this doesn't go far enough. Ports and terminals are also now coming into the		» Face to face discussions and people management "you may have done it this way for forty years, but compliance with the Code is now mandatory" » Short-cuts often don't work — if they did, we would already be doing them Dr Penelope Gooke					
11:00	spotlight and this has now hit IMO's radar. IAPH and Canada, joined by other maritime nations and NGOs, have asked IMO to "approve" a resolution on initiatives in ports. All of this is also linked to the UN's 17 sustainable development goals. This presentation will give an update on how ports and terminals are going to be affected and what they might be able to do about it. "The UN's 17 Sustainable Development Goals in a port and terminal perspective Initiatives on GHG reductions "Helping vessels to meet their reduction targets Captain Richard Brough OBE	12:35	Protection against explosion and fire in handling combustible cargoes Fires and dust explosions have always been far too common in the handling of organic materials, such as animal feed, foods and biomass However, recent experience shows a very great increase in the occurrence of these due to the growth in shipping of biomass fuels. W will look at common causes and preventive measures, including some important information on the need for more rigorous assessment of ignition hazards that has come to light recently through a number of incident investigations. » Common causes of fire and explosion — including results from					
11:25	Scrubbers – a solution for ports The use of exhaust gas cleaning systems (EGCS) has been permitted as a method of compliance with MARPOL Annex VI since 1997. MARPOL Annex VI regulates air pollution from ships. We will explore the benefits of EGCS over compliant fuel for terminal employees.		recent investigations » Material factors — susceptibility of different cargoes » Preventive measures » Regulation and best practice Professor Mike Bradley					
22.00	» What are EGCS or scrubbers and how do they work?	13:00	DISCUSSION					
	» Which is better – compliant fuel or EGCS?	13:10	Lunch					



PROGRAMME DAY TWO (CONTINUED)



Ways to improve stevedore working conditions

Improving stevedore safety continues to be a top priority for the bulk terminals industry. This presentation will assess the operating environment for stevedores, examining what technical measures can be incorporated into the machinery being operated and how better systems can assist the drive to improve safety.

» Risks and dangers for stevedores

14:10

14:35

15:00

- » Ship unloader safety systems for handling problematic products
- » Ship unloader operator assisting systems

Peter Göransson, Sales Manager Senior Advisor, Siwertell AB

Multi-layer collision avoidance: Active RTLS, passive RADAR and classic pull wires

Large machines usually have large blind spots. Operator assistance and collision avoidance are necessary productivity tools. Automated machines require a non-human collision avoidance system. In this session, we will use case studies to illustrate machine to machine and also machine to vehicle and human collision avoidance systems that have been implemented around the world using radar and complementing $\bar{\text{technologies}}$, providing an overview of a multi layer CAS approach combining both maximum safety and productivity.

- » Safety by observation of the machine's environment in real time
- » Multi-Layer technology to avoid nuisance alarm trips and high availability
- » Continuous and discontinuous hauling systems, stockpile machines, shiploader and shipunloader

Dr Christian Augustin, Director & QHSEC Manager, indurad GmbH and Managing Director, Yardeye GmbH

Enclosed spaces and associated risks

Enclosed spaces, whether in ships' holds or in other spaces, continue to pose a serious risk and the past few years have seen a spike in fatalities. This presentation will draw attention to these risks and what can be done to prevent them.

- » Definitions of enclosed or confined spaces
- » Examples of risks
- » Examples of fatal incidents
- » Risk management
- » IMO & ILO response

Oscar Egerström, Underwriter, TT Club

15:25 Discussion

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15:35	Guest speaker's closing address Captain Richard Brough OBE
 15.50	Signing of MoU between ABTO and ICHCA International
15:55	Chairman's close of conference Ian Adams
 16:00	Refreshments

URSE ANNOUNCEMENT

PORT AND TERMINAL OPERATIONS FOR BULK **CARGOES 2020 - SHORT COURSE**

Due to strong support for this course in March, ABTO is delighted to be partnering with The Wolfson Centre to offer Port and Terminal Operations for Bulk Cargoes again in 2020.

NEW FOR 2020: Our first course earlier this year included a visit to The Wolfson Centre's pilot plant. Interest was such that next year we will be offering an optional Practical Workshop, to be held in the The Wolfson's on-site industrial-scale pilot plant.

Course Dates: Tuesday 10 & Wednesday 11 March 2020 Optional Practical Workshop: Thursday 12 March 2020

The Wolfson Centre for Bulk Solids Handling Technology, University of Greenwich, Chatham Maritime, UK

For further details please email Simon Gutteridge events@bulkterminals.org or Caroline Chapman wolfson-enquiries@gre.ac.uk





The Wolfson Centre for Bulk Solids Handling Technology

"Made some very good contacts – the perfect niche event. Relaxed, intimate atmosphere and the programme gave me a good insight into our terminal customers' needs. We will be back." Mark Smith, Projects and Installations Manager, igus



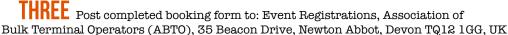
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THREE EASY WAYS TO REGISTER

Online: www.bulkterminals.org/events/event-registration.html

TWO Email: events@bulkterminals.org



Attendance at the event will be confirmed on receipt of the full balance and participants are advised to bring a copy of their confirmation with them



DELEGATE DETAILS

Please print clearly or attach a business card	l – your details may	appear incorrectly	listed if this part	of the form is unclear.
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Title: (Prof, Dr, Mr, Mrs, Ms)

Surname:

Initials:

Name for badge

Job title

Organisation/company

Address

Postcode Country

Tel Fax Mobile

Email Company website

ABTO member Yes No Membership no

Additional requirements

Vegetarian/special dietary meals (please specify)

Access requirements (please specify)

REGISTRATION FEES Please complete the appropriate box

Two Day Delegate Package:

ABTO Members £1000 + VAT

*Non-Members £1200 + VAT

Single Day Entry Delegate Package

ABTO Members £800 + VAT

*Non-Members £1000 + VAT

DISCOUNTS AVAILABLE FOR GROUP BOOKINGS contact Simon Gutteridge on +33 (0)321 47 72 19 or events@bulkterminals.org

*For details of how join ABTO and its benefits, including reduced conference fees, please visit: www.bulkterminals.org/membership.html



On receipt of your registration we will email an invoice with details of payment, which is due immediately.

Cancellations. Cancellations of a registered place must be received in writing no later than 14 days prior to the event. A charge of £100 + VAT will be made for cancellations received before this date, but it is regretted that no refunds will be issued after this date. However substitute delegates are welcome.