

# SUSTAINABLE OCEAN SUMMIT



# "OCEAN SUSTAINABLE DEVELOPMENT – CONNECTING ASIA AND THE WORLD"

## **SOS 2018 PROGRAM**

Hong Kong, November 14 – 16, 2018

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Draft - Subject to change





# SUSTAINABLE OCEAN SUMMIT

### **SCHEDULE AT A GLANCE**

#### TUESDAY 13 NOVEMBER

09:00	12:00	WOC Board Meeting (WOC Board only)
12:00	13:30	WOC Board + Members Lunch (WOC Board and Members only)
13:30	17:30	WOC Members Meeting (WOC Members only)
17:30	19:30	Delegates Registration and Sponsor Exhibits Installation
17:30	19:30	~ Welcome Reception : All SOS Delegates ~ Special Speaker: Maisie Cheng, Director of Marine, Hong Kong SAR

### DAY 1 - CONFERENCE

#### WEDNESDAY 14 NOVEMBER

08:30	10:00	Plenary Session: Ocean Executive Forum: The Signature SOS Multi-Sector Panel of CEOs
10:00	10:30	~ Morning Break ~
10:30	12:00	Plenary Session: Asian Shipping and Shipbuilding: Leadership and Challenges in Connecting Asia and the World
12:00	13:30	~ Lunch ~
12:00	13:30	~ CEOcean Club (invitation only) ~
13:30	15:00	Plenary Session: Women in Ocean/Coastal Business: Leadership and Sustainable Development
15:00	15:30	~ Afternoon Break ~
15:30	17:00	Parallel Sessions:  1. Part 1- Biofouling and Invasive Aquatic Species: The GEF-UNDP-IMO GloFouling Partnerships Project Opportunities for Business Collaboration and Implementation  2. UN Law of the Sea: New Legally Binding Instrument on Biodiversity in Areas Beyond National Jurisdiction (BBNJ) and Ocean Industries
17:00	17:30	~ Late Afternoon Break ~
17:30	19:00	Parallel Sessions:  1. Part 2 – Biofouling and Invasive Aquatic Species: The GEF-UNDP-IMO GloFouling Partnerships Project Opportunities for Business Collaboration and Implementation  2. Responsible Marine Mining: Leadership and Collaboration for Accountable Ocean Mining - from Nearshore to the Deep Sea
19:00	22:00	~ SOS Reception and Dinner ~  Special Speaker: James Michel, Former President, Seychelles



### **DAY 2 - CONFERENCE**

### THURSDAY 15 NOVEMBER

08:30	10:00	Plenary Session: Ocean 2030: Global Projections for Ocean Industry Activity (covering ocean transportation, energy, food, tourism and minerals)
10:00	10:30	~ Morning Break ~
10:30	12:00	Parallel Sessions:  1. Plastics/Waste Removal from Ocean and Island Areas and MicroPlastic Detection: Maritime Industry Experience, Innovation, Practical Solutions  2. SMART Ocean – SMART Industries and the Arctic: Advancing Industry-Science Collaboration for Data Collection in Support of Safe and Responsible Arctic Development
12:00	13:30	~ Lunch ~ Special Speaker: Peter Thomson, Special Envoy for the Ocean, United Nations
13:30	15:00	<b>Plenary Session:</b> One Belf, One Road, One Ocean: International Business Collaboration to Help Ensure the Maritime Silk Road Leads to a Sustainable Destination
15:00	15:30	~ Affernoon Break ~
15:30	17:00	Parallel Sessions:  1. Ocean Business Action on Climate Change: Implementing Port Adaptation and Exploring Ocean Negative Emission Technologies  2. Aquaculture: Ensuring Sustainable Production in Crowded Seas
17:00	17:30	~ Late Afternoon Break ~
17:30	19:00	Parallel Sessions:  1. The Role of the Ocean/Maritime Legal Community in Understanding and Addressing Risk and Opportunity in the Blue Economy and Ocean Sustainable Development  2. LNG as a Marine Fuel: Changing the CO2 Footprint of Shipping and Other Ocean Industries
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oung Ocean Professionals: Blue Economy Networking social event

### **DAY 3 - CONFERENCE**

### FRIDAY 16 NOVEMBER

08:30	10:00	Plenary Session: The Digital Ocean, Big Ocean Data and the Ocean Cloud: Data Driven Sustainable Development of the Seas
10:00	10:30	~ Morning Break ~
10:30	12:30	Plenary Session: Ocean Investment Platform: Financing and Innovation for Ocean Sustainable Development
12:30	14:00	~ Lunch ~
14:00	17:00	WOC Board Meeting (WOC Board only)
19:00	21:00	WOC Board Dinner (WOC Board only)



#### Ocean Executive Forum: The Signature SOS Multi-Sector Panel of CEOs

#### Framing questions

- What is the ocean industry CEO perspective on ocean economic activity to 2030, especially in relation to Asia's role in the ocean economy?
- What opportunities and risks do ocean industry CEOs think that these scenarios create for each sector, for the ocean economy and ocean business community overall, and for the ocean itself?
- How do ocean industry leaders view the Sustainable Development Goals (SDGs) in relation to projected ocean economic activity and future risks and opportunities?

#### Chairs/Moderators

Paul Holthus, Founding President and CEO, World Ocean Council (confirmed)

#### Speakers/Panel

- Shipping: Kenneth Koo, Group Chairman and CEO, TCC Group (confirmed)
- Submarine Cables: Mike Constable, CEO, Huawei Marine Networks (confirmed)
- Oil and Gas: Mary Hackett, Former CEO, Baker Hughes (BHGE), Australia, NZ, PNG (confirmed)
- Aquaculture: Mohamed Razali Bin Mohamed, CEO, Aquagrow Corporation (confirmed)
- Fisheries: John Keeler, CEO, Blue Star Foods (confirmed)
- Cruise Tourism: Gerry Larsson-Fedde, Vice-President, Marine Operations, Costa Asia Group (confirmed)
- Ocean Energy: Ali Baghaei, CEO, Aquanet Power (confirmed)

# Asian Shipping and Shipbuilding: Leadership and Challenges in Connecting Asia and the World

#### **Framing questions**

- With the significant growth in Asian shipping over the past several decades, what will the development of Asian shipping look like through 2030?
- What are the main challenges for Asian shipping in addressing sustainable development, and what can Asian shipowners do to best collaborate with each other and with other ocean industries – in the region and globally – to help advance "Corporate Ocean Responsibility"?
- What opportunities does sustainable development create for the shipbuilding industry, especially in Asia? Are there possible sustainable development synergies across the sectors, e.g. shipping, fishing, offshore energy, and is there sufficient cross-sectoral interaction to identify and achieve synergies?

#### Chairs/Moderators

Kenneth Koo, Group Chairman and CEO, TCC Group (confirmed)

- Jack Hsu, Managing Director, Oak Maritime; Chairman, Hong Kong Shipowners Association (HKSOA) (confirmed)
- C. K. Ong, President, U-Ming Marine Transport Corporation (confirmed)
- Michael Nagler, Head of Chartering, Noble Group (confirmed)
- Naoki Ueda, Senior Vice President, Senior Chief Engineer, Mitsubishi Shipbuilding (confirmed)



#### Women in Ocean/Coastal Business: Leadership and Sustainable Development

#### Framing questions

- How well is women's leadership in the ocean and coastal business community advancing, and what must be done to improve this?
- How does this relate specifically to ocean sustainable development and the Blue Economy?
- What are the challenges and opportunities for better advancing leadership by women in the ocean and coastal industries, especially regarding sustainable development, and particularly in the Asia-Pacific region?

#### Chairs/Moderators

 Despina Panayiotou Theodosiou, CEO, Tototheo Maritime; President, Women's International Shipping and Trading Association (WISTA International) (confirmed)

#### Speakers/Panel

- Shipping: Sabrina Chao, Executive Chairman, Wah Kwong Maritime (confirmed)
- Oil and Gas: Mary Hackett, Former CEO, Baker Hughes (BHGE), Australia, NZ, PNG \*
- Fishing: Lori Kennedy, CEO, Louisbourg Seafoods (confirmed)
- Aguaculture: Donna Lanzetta, CEO, Manna Fish Farms (confirmed)
- Cruise Tourism: Helen Huang, President, Greater China, MSC Cruises (confirmed)
- Offshore Renewable Energy: Alla Weinstein, Founder and CEO, Trident Winds (confirmed)
- Hospitality/Resorts: Sonia Cheng, CEO, Rosewood Hotel Group \*

# The Digital Ocean, Big Ocean Data and the Ocean Cloud: Data Driven Sustainable Development of the Seas

#### Framing questions

- What are the status, trends and forecasts for the development of the Digital Ocean, Big Ocean Data, the Internet of Things (IoT) and the use of Cloud Computing for ocean sustainable development, especially in Asia?
- What are the benefits (economic, sustainability, operational oceanography, maritime security, etc.) from a Digital Ocean that produces Big Ocean Data and harnesses Cloud Computing in support of Agenda 2030, and what are the challenges to achieving these benefits?
- What are the opportunities for better industry leadership and collaboration in advancing the Digital Ocean, Big Ocean Data and Cloud Computing for the Blue Economy, especially in Asia?

#### Chairs/Moderators

Bill Staby, CEO, Resolute Marine Energy (confirmed)

- Elisabeth Tørstad, CEO, Digital Solutions, DNV GL (confirmed)
  - Topic TBD
- Pierre Bahurel, CEO, Mercator Ocean International (confirmed)
  - Topic TBD
- John Breslin, General Manager, SmartBay Ireland (confirmed)
  - SmartBay A Test Bed for Proving New Technologies and Innovations for Digital Ocean and Marine and Renewable Energy Applications to Support the Sustainable Development of Ireland's Blue Economy
- Tina Liu, Vice President, Elane (confirmed)
  - Topic TBD



# Ocean 2030: Global Projections for Ocean Industry Activity (covering ocean transportation, energy, food, tourism and minerals)

#### Framing questions

- What is the future of industry activity in key ocean economic sectors, with a focus on Asia?
- What are the key trends, geographies, assumptions, opportunities and constraints for each sector through to 2030, the time frame of the U.N. SDGs?
- What opportunities and risks do these scenarios create for each sector? For the ocean economy and ocean business community overall? For the ocean itself? — Especially in Asia.

#### Chairs/Moderators

Christine Valentin, COO, World Ocean Council (confirmed)

#### Speakers/Panel

- Shipping: Kathi Stanzel, Managing Director, INTERTANKO (confirmed)
- Ports: Patrick Verhoeven, Managing Director Policy and Strategy, International Association of Ports and Harbors (IAPH) (confirmed)
- Aquaculture: Guillaume Drillet, Past President, World Aquaculture Society, Asian Pacific Chapter (confirmed)
- Fisheries: Paul Lansbergen, President, Fisheries Council of Canada; Member, International Coalition of Fisheries Associations (ICFA) (confirmed)
- Cruise Tourism: Dimity McCredie, Advocacy Director, Cruise Lines International Association (CLIA)
   Australasia (confirmed)
- Seabed Mining: Samantha Smith, Director, Blue Globe Solutions (confirmed)
- Offshore Wind Energy: Edgare Kerkwijk, Board Member, Asia Wind Energy Association (confirmed)
- Ocean Energy: Ji Wang, National Ocean Technology Center, State Oceanic Administration, China (confirmed)

# Ocean Investment Platform: Financing and Innovation for Ocean Sustainable Development

#### Part 1: Innovation and Ocean Sustainable Development

#### Framing questions

- How have the dynamics of innovation evolved, how does this relate to the urgent, complex, global challenges of ocean sustainable development, and are there lessons from other realms, e.g. CleanTech?
- What is the role of the innovation "ecosystem", i.e. accelerators, challenge competitions, incubators, venture capital, etc., and how can the collective role of these actors be optimized to address ocean challenges?
- How have corporate leaders in other sectors responded as a benchmark for maritime/marine, with consideration of corporate venture capital and the entrance of impact investors (e.g. family offices, foundations)?

#### Speaker

Mark Huang, Co-Founder, SeaAhead (confirmed)



#### Part 2: Financing Ocean Sustainable Development

#### **Framing questions**

- How can investors better collaborate with companies from the ocean business community to identify sustainable development investment opportunities and priorities, with a focus on the maritime/shipping sector?
- What is needed to improve and increase the pipeline of viable ocean sustainable development investment opportunities, especially in Asia?
- What can be done to achieve synergies and scale up investment in ocean sustainable development, and how can investors lead the way, especially in Asia, and in relation to the maritime/shipping sector?

#### Moderator

• Jacques Demers, Chairman and Managing Partner, AGAWA Partners (confirmed)

#### Speakers/Panel

- Benjamin Wong, Head, Transport and Industrial Sectors, Invest Hong Kong (confirmed)
- Edgare Kerkwijk, Managing Director, Asia Green Capital (confirmed)
- Chris Botsford, Co-Founder, Joint Chief Investment Officer, ADM Capital (confirmed)
- Ben Ridley, Director; Deputy Global Head Sustainability Affairs, Credit Suisse AG HK (confirmed)
- Nicolas Parrot, Managing Director, Head Transportation Sector, Investment Banking Asia Pacific, BNP Paribas Singapore (confirmed)
- James Tong, Managing Director-Regional Head of Global Shipping and Logistics, Asia Pacific and Japan, Citi (confirmed)
- Mohamed Al Madfaei, Executive Director, Integrated Environment Policy and Planning at the Environment Agency, Abu Dhabi (confirmed)

### <u>Part 3: The Intersection of Ocean Business, Investors and Innovation: The Way Forward to Sustainable Development</u>

#### Framing questions

- How can the ocean business community best engage with the innovation "ecosystem" to develop, deliver and implement solutions in support of "Corporate Ocean Responsibility"?
- How can business, investors and innovators best navigate the intersection of early stage bluetech venture investing and ocean sustainability?
- What keeps ocean business leaders up at night, and how can innovation and investment solve these challenges?

#### Moderator

Mark Huang, Co-Founder, SeaAhead (confirmed)

#### Moderated dialogue with

- Investment panel and moderator
- Maritime corporate industry representatives



#### One Belt, One Road, One Ocean: International Business Collaboration to Help Ensure the Maritime Silk Road Leads to a Sustainable Destination

#### Framing questions

- What are the status and plans for the Maritime Silk Road in the Asia/Pacific region, the Indian Ocean, around Europe and in the Arctic Ocean (Northern Sea Route)?
- How are sustainable development issues being identified and addressed in the Maritime Silk Road projects?
- How can the international ocean business community best collaborate with Maritime Silk Road developments in support of sustainable development?

#### Chairs/Moderators

 Christine Loh, Chief Development Strategist, Division of Environment and Sustainability, Institute for the Environment, Hong Kong University of Science and Technology \*

- Courtney Lowrance, Principal Environment Specialist (Operations), Asian Infrastructure Investment Bank (AIIB) \*
- Astrid Skala-Kuhmann, Special Advisor G20, Belt and Road Initiative, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (confirmed)
- Yiwei Wang, Professor, School of International Studies; Director, Institute of International Affairs;
   Director, Center for EU Studies, Renmin University of China (confirmed)
- Egill Thor Nielsson, Executive Secretary, China-Nordic Arctic Research Centre (CNARC) (confirmed)



#### Parallel Sessions and/or Workshops

#### MARINE POLLUTION

Plastics/Waste Removal from Ocean and Island Areas and MicroPlastic Detection: Maritime Industry Experience, Innovation, Practical Solutions

MARINE POLLUTION
"SDG 14.1 By 2025, prevent and
significantly reduce marine pollution"

#### Framing questions

- How are vessels being used to clean up plastics and marine debris, and what are the opportunities to expand this?
- How can the maritime industry help keep plastics and other wastes out of the ocean by facilitating their removal from islands and coastal areas, especially in the Asia-Pacific region?
- What are the latest developments in detecting microplastics at sea, and can this be scaled up for use by ships of opportunity?

#### Chairs/Moderators

Stéphanie Groen, Managing Director, Water and Environment, DHI (confirmed)

- Mark Ko, Executive Director, Tian San Shipping (confirmed)
  - Marine Waste/Debris Clean up from Waterways, Coastlines and Island Areas; An Overview
    of the Waste Ecosystem, Solutions and Innovations to Clean Up the Seas
- Lara Tyrrell, Group Sustainable Business Manager, China Navigation/Swire Pacific Offshore Operations (confirmed)
  - Business and Governance Working in Partnership to Remove Waste Streams from Pacific Islands for Responsible Recycling Elsewhere
- Richard Hardiman, CEO, RanMarine Technology \*
- Marcelo Hidalgo, Science and Standards Coordinator, Aquaculture Stewardship Council (confirmed)
  - How the Aquaculture Industry can Minimize the Negative Impact of Plastic Pollution into the Ocean – A Practical Approach
- Richard Roberts, Co-Founder, Ocean Saviour \*
- Yoshioka Tatsuya, Founder and Director, Peace Boat (confirmed)
  - Reducing Plastic Waste from Cruise Lines: Current Actions and Coming Innovation and Advances
- Sheila Hemami, Director, Strategic Technical Opportunities, Draper \*



Part 1: Biofouling and Invasive Aquatic Species:
The GEF-UNDP-IMO GloFouling Partnerships Project
- Opportunities for Business Collaboration and
Implementation

#### MARINE POLLUTION

"SDG 14.1 By 2025, prevent and significantly reduce marine pollution"

#### Framing questions

- What is the GEF-UNDP-IMO GloFouling Partnerships Project?
- How can the business community, investors and innovators engage in addressing the shared problem of biofouling and the introduction of invasive species?
- How is the issue of biofouling and invasive species being addressed in China?

#### Chairs/Moderators

Paul Holthus, Founding President and CEO, World Ocean Council (confirmed)

#### Speakers/Panel

#### Part 1: Introducing the GloFouling Project and Biofouling Risk

- Paul Holthus, Founding President and CEO, World Ocean Council (confirmed)
  - Engaging the Ocean Business Community, Investors and Innovators in Tackling Biofouling and Invasive Species

#### Part 2: Addressing Biofouling and Invasive Species in China

- Jian Wang, Technical Director, Jotun COSCO Marine Coatings Co (confirmed)
  - Recent Development of Regulatory Issues in China Marine Coatings
- Gui Taijiang, Chief Engineer, Marine Chemical Research Institute (confirmed)
  - The Situation of R&D for Marine Coatings in China
- Gong Xuanwei, Senior Surveyor, China Classification Society (confirmed)
  - Management and Control of Toxic and Hazardous Substances in Marine Coatings
- Wang Jingjing, Vice President, Xiamen Advanced Materials Academy; Professor, Luoyang Ship Material Research Institute (confirmed)
  - Performance Test of Marine Antifouling Paints





# Part 2: Biofouling and Invasive Aquatic Species: The GEF-UNDP-IMO GloFouling Partnerships Project — Opportunities for Business Collaboration and Implementation

MARINE POLLUTION
"SDG 14.1 By 2025, prevent and
significantly reduce marine pollution"

#### **Framing questions**

- For advancing the role of coatings in biofouling prevention, what are the state of the art, trends, challenges and opportunities?
- For the cleaning of hulls and other surfaces, what are the state of the art, trends, challenges and opportunities?
- What is the future for a comprehensive, global ecosystem of biofouling prevention and treatment, especially in reducing the introduction of invasive species?

#### Chairs/Moderators

• Julian Hunter, Director, Sustainable Value, AkzoNobel (confirmed)

- Neil Oxtoby, Section Leader Fouling Control, AkzoNobel (confirmed)
  - Role of Coatings in GHG Reduction/Green Shipping
- Neal Blossom, Director of Global Regulatory Affairs, American Chemet (confirmed)
  - The Science and Regulation of Antifouling Biocides
- Laurance Langdon, General Manager, HullWiper (confirmed)
  - Biofouling Treatment: State of the Art, Trends, Challenges and Opportunities
- Aurore Trottet, Senior Environmental Scientist, Water and Environment, DHI (confirmed)
  - Biofouling: New Tools for Risk Minimization and Compliance



#### **OCEAN AND CLIMATE**

# Ocean Business Action on Climate Change: Implementing Port Adaptation and Exploring Ocean Negative Emission Technologies

CLIMATE CHANGE AND OCEAN ACIDIFICATION

"SDG 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels"

#### **Framing questions**

- How can the ocean business community best collaborate with other key stakeholders, e.g.
  multilateral/bilateral development assistance, national governments, to ensure that ports and
  essential coastal infrastructure are being adapted to achieve resiliency during extreme events,
  especially in small islands and developing countries, particularly in the Asia-Pacific region?
- What are the finance and investment options for resilient port and coastal infrastructure, including for green infrastructure?
- What is the potential for ocean-based negative emission technologies (NETs), what science is available, what are the risks and benefits, and what is needed to advance careful, science-based consideration of Ocean NETs as a potentially viable, important means to address increasing atmospheric CO2?

#### Chairs/Moderators

Cary Anne Cadman, Environment Sector Coordinator, World Bank (confirmed)

- Chris Allen, Bay Area Lead/Advance Planning Group, Jacobs (confirmed)
  - Port Resiliency to Sea Level Rise and Extreme Events: Private Sector Collaboration to Advance
     Adaptation for Small Islands and Developing Countries
- Carlo Patteri, Director of Sales, Water and Environment, DHI (confirmed)
  - Climate Adaptation Decision Support Systems (CADSS) Related to Port Resilience and Climate Adaptation
- John Ridley, Managing Director, Ocean Nourishment (confirmed)
  - Ocean NETs: Responsible Negative Emissions Technologies (NETs) for CO2 Sequestration at Sea
- Pål Bakken, Founder and CEO, Casulo (confirmed)
  - CO2 Sequestration at Sea through Algae



#### LNG as a Marine Fuel: Changing the CO2 Footprint of Shipping and Other Ocean Industries

CLIMATE CHANGE AND OCEAN ACIDIFICATION

"SDG 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels"

#### Framing questions

- What are the benefits, trends and forecasts for LNG as a major marine fuel, and what are the barriers to advancing the development and delivery of LNG as a marine fuel in the next two decades?
- What is the potential for developing LNG as a marine fuel not only for shipping, but also for other maritime sectors, e.g. fishing, ferries, offshore service/supply vessels?
- In its transition to cleaner fuels what does the industry plan on doing with open loop and closed loop scrubber sulphur discharge?

#### Chairs/Moderators

TBD

- Walter P. Purio, CEO, LNG Marine Fuel Institute (confirmed)
  - Leading the Way: Western Australia is the Key to Driving LNG as a Marine Fuel
- Chris Hughes, General Manager, Greater China Marine & Offshore Business Development, Lloyd's Register (confirmed)
  - Topic TBD
- James Forsdyke, Area Manager, Hong Kong and Taiwan, Lloyd's Register Asia (confirmed)
  - An Update on LNG Shipping
- Rowan Fenn, CEO, Rise-X (confirmed)
  - The Great Industrial Decentralization: The Environmental Imperative Driving Industrial Supply Chain Transformation
- Rene Leung, New Building Projects Manager (Sales & Promotions), MAN Energy Solutions (confirmed)
  - Topic TBD
- Bill Guo, Managing Director, ICBC Leasing \*
- Michihiko Nakano, General Manager, Bunker Business Office, Mitsui O.S.K. Lines (MOL) \*
- Roger Dyhrberg, Managing Director, CleanSubSea Ltd \*



#### FOOD SECURITY: SUSTAINABLE FISHING AND AQUACULTURE

## Aquaculture: Ensuring Sustainable Production in Crowded Seas

FOOD SECURITY: SUSTAINABLE FISHING AND AQUACULTURE "SDG 14.4 By 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing"

#### Framing questions

- With Asia as by far the most important aquaculture area of the world, how has the industry evolved in the increasingly multiple-use ocean situation in Asia?
- What are the barriers to sustainable aquaculture expansion, and what is needed to help expand and accelerate sustainable aquaculture?
- How can aquaculture meet future global human protein demands sustainably in an increasingly crowded, multi-use ocean, notably in Asia?

#### Chairs/Moderators

• Guillaume Drillet, Past President, World Aquaculture Society, Asian Pacific Chapter (confirmed)

- May Myat Noe Lwin, Farmer; USSEC representative; Director of the Board, World Aquaculture Society (confirmed)
  - Development Plan for Myanmar Offshore Mariculture
- Michael Voigtmann, Partner, Wintershine; CEO, Singapore Aquaculture Technologies (confirmed)
  - Inter-industry Challenges When Growing Fish in the Strait of Johor
- Aurore Trottet, Senior Environmental Scientist, Water and Environment, DHI (confirmed)
  - Planning Aquaculture Zones in Crowded Coastal Areas: Case Study from Denmark
- Hal Stillman, Director, Technology Development and Transfer, International Copper Association (ICA) (confirmed)
  - Copper Alloy Mesh for Sustainable Aquaculture



#### OCEAN KNOWLEDGE, RESEARCH AND TECHNOLOGY

SMART Ocean – SMART Industries and the Arctic: Advancing Industry-Science Collaboration for Data Collection in Support of Safe and Responsible Arctic Development OCEAN KNOWLEDGE, RESEARCH AND TECHNOLOGY

"SDG 14.a Increase scientific knowledge, develop research capacities and transfer marine technology"

#### Framing questions

- How can industry better engage in data collection in the Arctic to advance knowledge in support
  of safe and responsible shipping and other economic activity, as a regional WOC SMART Ocean
   SMART Industries Program?
- What are the benefits and barriers to closer business cooperation with researchers, and specifically for greater industry involvement in data collection – and how can benefits be accentuated and barriers addressed?
- What are the priority locations, topics and technology to engage more ships and platforms of opportunity in collecting data in the Arctic, e.g. for bathymetry, as part of the Seabed 2030 initiative?

#### Chairs/Moderators

• Pierre Bahurel, CEO, Mercator Ocean International (confirmed)

- Nicole Biebow, Project Manager, EU-PolarNet; Head of International Cooperation Unit, Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung (confirmed)
  - Arctic Research Icebreaker Consortium: A Strategy for Meeting the Needs for Marine Based Research in the Arctic Ocean
- Christine Valentin, COO, World Ocean Council (confirmed)
  - Establishing a Regular Dialogue with the Maritime Industry: Challenges and Opportunities
- Annu Oikkonen, Research Scientist, Marine Research, Finnish Meteorological Institute (confirmed)
  - Expanding the Observation Capacities in the Arctic Ocean by Cooperating with the Maritime Industry
- Karl Andreas Almås, Special Advisor, SINTEF Ocean; Chairman, Norwegian Center of Expertise, Aquatech Cluster (confirmed)
  - Technology for Arctic Data Collection from Ships of Opportunity
- Sai-Tick Chan, Senior Scientific Officer, Hong Kong Observatory; Vice-Chair, Voluntary Observing Ships Panel (VOS), Ship Observations Team (SOT), WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM) (confirmed)
  - Topic TBD
- TBD, Industry Representative \*



#### OCEAN GOVERNANCE AND PLANNING

UN Law of the Sea: New Legally Binding Instrument on Biodiversity in Areas Beyond National Jurisdiction (BBNJ) and Ocean Industries

OCEAN GOVERNANCE INCLUDING UNCLOS "SDG 14.c Ensure the full implementation of international law, as reflected in UNCLOS for States parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties"

#### Framing questions

- What does the draft legally binding BBNJ agreement consist of after the first round of negotiations in 2018?
- What reaction and input do ocean business community representatives have to the draft agreement?
- What is the process for formal consideration and adoption of the BBNJ agreement by the U.N.
   General Assembly (UNGA), and how can and should ocean industries engage with other ocean stakeholders, including governments, as the BBNJ agreement moves forward?

#### Chairs/Moderators

• Serge Segura, Ambassador for the Oceans, France (confirmed)

- Serge Segura, Ambassador for the Oceans, France (confirmed)
- Gabriele Goettsche-Wanli, Director, U.N. Division for Ocean Affairs and the Law of the Sea (DOALOS) (confirmed, video presentation)
- Andreas Kaede, Attorney, Haver & Mailänder Rechtsanwälte (confirmed)
- Virginie Tassin, Founder and Director, VTA-TASSIN Law (confirmed)



# Responsible Marine Mining: Leadership and Collaboration for Accountable Ocean Mining – from Nearshore to the Deep Sea

OCEAN GOVERNANCE INCLUDING UNCLOS "SDG 14.c Ensure the full implementation of international law, as reflected in UNCLOS for States parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties"

#### Framing questions

- What are the opportunities and challenges for advancing responsible marine mining (nearshore, within national waters, in international waters)?
- What has been the experience from nearshore mining and terrestrial mining, and can this help ensure that marine mining addresses these challenges and is responsible as it moves further offshore?
- Is there a value in having an international "platform" to bring together the marine mining
  industry to catalyze collaboration within the sector and facilitate interaction with other
  stakeholders, coordinate development of shared priorities and agenda for action, and work to
  advance practical, cost-effective solutions, practices, policies and regulation to address marine
  mining based on good science?

#### Chairs/Moderators

Peter Glazebrook, Regulatory Advisor, Environment Science and Law, Adjunct Professor,
 Sustainable Minerals Institute, University of Queensland (confirmed)

- Samantha Smith, Director, Blue Globe Solutions (confirmed)
- Henk van Muijen, Managing Director, IHC Mining (confirmed)
- Renee Grogan, Director, Gro Sustainability (confirmed)
- Eleanor Martin, Partner, Norton Rose Fulbright \*



#### **CROSS-CUTTING SESSIONS**

The Role of the Ocean/Maritime Legal Community in Understanding and Addressing Risk and Opportunity in the Blue Economy and Ocean Sustainable Development

#### Framing questions

- What is the role of the ocean/maritime legal community in addressing the risks, opportunities and challenges of the growing and increasingly diverse ocean economy?
- What experience, lessons learned and ongoing efforts can the ocean/maritime legal community bring to help advance ocean sustainable development, and is there a need for greater collaboration amongst the ocean/maritime legal community on sustainable development?
- What are the priority ocean development and sustainability issues for engaging the ocean/maritime legal community – from the perspective of: a) the legal community, b) the overall ocean business community and c) other ocean stakeholders (e.g. government, NGOs)?

#### Chairs/Moderators

Jonathan Webb, Partner, Holman Fenwick Willan \*

- Catherine Smith, Senior Associate, Holman Fenwick Willan (confirmed)
- Liv Monica Stubholt, Partner, Selmer (confirmed)
- Bryan Druzin, Associate Professor of Law, Director of LLM Programmes, Faculty of Law, Chinese University of Hong Kong (confirmed)
- Nicola Mason, Senior Vice President, Deputy Head, Skuld Hong Kong \*