Blue Growth Data Challenge: Engaging Industry –
WORLD OCEAN COUNCIL
Smart Ocean-Smart Industries

Paul Holthus, CEO
World Ocean Council
paul.holthus@oceancouncil.org
www.oceancouncil.org

Global Ocean Business Community
Leadership and Collaboration in Sustainable Development, Science and Stewardship

- Private sector is a fundamental, essential partner in ocean sustainable development
- Ocean sustainable development and cannot succeed without constructive collaboration with those undertaking ocean economic activities, i.e. ocean business community
- Many companies are making significant efforts and progress in responsible ocean economic activity
- Leadership companies are increasingly working on international, multi-sectoral ocean sustainability leadership through the World Ocean Council
The Multiple Use Ocean

Growing Ocean Use

- Shipping
- Mariculture/Aquaculture
- Offshore oil and gas
- Mining / Seabed mining
- Fisheries
- Cruise and coastal tourism
- Dredging
- Submarine cables/pipelines
- Offshore wind energy
- Wave/tidal energy
- Ports/marinas
- Recreational boating/use
- Desalination
- Navy/military use
- Carbon sequestration

Expanding

- Kinds of use
- Levels of activity
  - Duration
  - Intensity
  - Frequency
- Location of activity
  - Geographical Extent
  - Frequency

- Finance/Investment
- Insurance
- Maritime Legal
The Ocean Business Community Challenge

- **Ocean industries require access and social license** to use ocean space and resources
- Many of the **critical issues** creating impacts and affecting access and social license are **cross-cutting or cumulative**
- Sustaining ocean health and productivity requires **responsible use** and stewardship by all users
- Best efforts by a single company, or an entire industry sector, are **not enough** to secure ocean health
- Ocean industries will benefit from collaboration with other sectors to **create synergies** and **economies of scale** to address impacts and ensure access and social license
- **Need structure/process** for leadership and collaboration
World Ocean Council

International, Cross-Sectoral Business Leadership Alliance

- Bringing ocean industries together, e.g. shipping, oil/gas, fisheries, aquaculture, tourism, offshore renewables, etc.
- Catalyzing private sector leadership and collaboration collaboration in
  - Advancing “Corporate Ocean Responsibility”
  - Communicating responsible ocean industry/economy
- 70+ members globally; 100’s of actively engaged companies; 35,000+ in global network
- Research, scientific and academic institution members as well

Goal: Healthy, productive global ocean and its sustainable use and stewardship by responsible ocean business community

Creating business value for responsible companies

- Access and social license for responsible ocean use
- Synergies and economies of scale in addressing issues
- Stability and predictability in ocean operations

World Ocean Council: Members

A.P. Moller-Maersk A/S
Agawa Partners
Althi Tankers S.A.
Arctic Shipping
ANCHORS
Aquamundo de Paris – Cinéacqua
Bard Publication
BRIM Penlaw
Blank Rome
Cape Breton University
CESI, Engineering & Environment Division
China Navigation Company/Seavey Pacific Offshore
Class NK
Cruise Lines International Association (CLIA)
CSA Ocean Sciences Inc.
DHI
exactEarth
ESRI
FGN ANZDEC
FOB
Global Ocean Consulting, LLC
Guaf Agency Company Ltd (GAC)
Heerema Marine Contractors Nederland SE
Heidmar, Inc.
Hella Media
Heptburn BioCare
Holman Fenwick Willan LLP
HR Wallingford
HIC Mining
Inmarsat
Int’l Ass’n of Geophysical Contractors (IAGC)
Int’l Chamber of Shipping (ICS)
JASCO Applied Sciences
L3 MarPro
Liquid Robotics
Lloyd’s Register
Ludde Haslum Seafoods
Marine Acoustics, Inc.
Marine Assets Corporation
Maritime Executive
Memorial University – Marine Institute
Mitsubishi Heavy Industries
Nautical Institute
Nautilus Minerals, Inc.
N-1 America Marine Ener’s Protection Ass’n
Ocean Nourishment
Oldendorff Shipping GmbH & Co. KG
DLRAC SPS
Orange Marine
Planet OS (formerly Marinepilots)
Principle Power
QinetiQ Corporation
Resolution Marine Energy
RightShip
Royal Greenland A/S
Sanford Limited
Scottish Marine Institute (SMI)
Southall Environmental Associates (SEA)
Stena Bulk AB
SubCtech GmbH
Sundburst Sensors
Tai Chong Cheang (TCC) Steamship Co. Ltd
Techrop
Thordon Bearings Inc.
TierraMar Consulting
Twin Dolphins
University of Texas Marine Science Inst
Vieira de Almeida & Associates (VDA)
Windward Ltd
Woodside Energy
WOC Partnerships and Formal Recognition

- UNESCO Intergovernmental Oceanographic Commission (IOC) – MOU
- International Hydrographic Organization (IHO) – Official Observer
- Group on Earth Observations (GEO) – Accredited Partner
- International Seabed Authority (ISA) – Accredited Observer
- Convention on Biological Diversity (CBD) – Accredited to attend SBSTTAs and COPs
- International Whaling Commission (IWC) – Accredited Observer
- UN Framework Convention on Climate Change (UNFCC) – Accredited to attend COPs
- International Standards Organization (ISO) – Underwater acoustics Sub-Committee
- Global Business Alliance for Sustainable Dev’t of Int’l Chamber of Commerce (ICC) – Member
- Ocean Climate Platform – Accredited Partner
- China Belt and Road Network – Partner

WOC: Global Ocean Industry Leadership

Major Cross-Cutting Framework Areas:

- **Sustainable Development Goals (SDGs)** for the Ocean Business Community
- Ocean Investment Platform
- Young Ocean Professionals Network
- Sustainable Ocean Summit
- Regional Ocean Leadership Groups
WOC Program and Theme Areas

- **Improving Ocean Knowledge**
  - Smart Ocean / Smart Industries:
    - Data from Industry Vessels/Platforms of Opportunity
- **Food Security**
  - Sustainable fisheries/reduced IUU fishing
  - Sustainable aquaculture
- **Disaster Risk Reduction**
  - Port/coastal infrastructure adaptation and resilience
- **Energy Decarbonization**
  - Ocean renewable energy

WOC Program and Theme Areas (cont.)

- **Marine Pollution Reduction**
  - Plastics/Port Reception Facilities
  - Biofouling/invasive species, Marine sound
- **Marine Biodiversity Conservation**
  - Marine protected areas
- **Ocean Governance, Policy and Planning**
  - UNCLOS/BBNJ, Convention on Biological Diversity …
  - Marine Spatial Planning, Ocean zoning
- **Climate Change**
  - Ocean acidification
Global Ocean Industry Leadership: Smart Ocean - Smart Industries

Ensure a wide range of industry vessels and platforms are:

- **Providing routine, sustained, standardized information** on the ocean and atmosphere
- Contributing to describing the **status, trends and variability** of oceanographic and atmospheric conditions
- **Improving the understanding, modeling and forecasting** of oceanic ecosystems, resources, weather, climate variability and climate change

Establish a program to:

- **Expand the number of vessels and platforms** that collect standardized ocean, weather and climate data
- **Improve the coordination and efficiency of data sharing** and input to national/international systems
- Build on “ships/platforms of opportunity” programs

Opportunities of Ships

50,054 ships (Oct 2010)

- Tankers: 13,175
- Bulk Carriers: 8,687
- Container ships: 4,831
- Passenger ships: 6,597
Opportunities of Fishing Vessels

- ~1.3 million vessels
- Over 85% of world’s fishing fleet is in Asia

Opportunities of Submarine Cables

- More than 1 million km of telecom cables
- Subsea power cables increasing for grids, platforms and renewables
Other Ship and Platform Opportunities

- Oil and gas
- Aquaculture
- Ferries
- Offshore wind energy
- Wave/tidal energy

International Ship/Platform Data Collection

**Comprehensive**
- Incorporates needs and opportunities from different industries
- Addresses ocean, weather and climate data needs

**Scaleable**
- Within industries
- Across industries
- Upgradeable over time

**Entry Options**
- Retrofit – existing vessels and platforms
- New builds

**Cost-Efficient**
- Synergies – within and between industries
- Economies of scale
### Smart Ocean-Smart Industries: How it works

**WOC...**

- Engages scientific institutions to identify:
  - Priority data collection needs and areas
  - Appropriate, cost-effective, ship-suitable technology
- Identifies and recruits companies:
  - With vessels/platforms operating in the priority areas
  - Interested/capable of hosting/depoying instruments or hosting scientists
- Instigates and facilitates working relationship between the company and the scientific institution
- Monitors, coordinates and supports interaction between company and scientific institution
- Ensures industry data collection efforts are efficient, cost effective and contribute to national and international public science programs

### Smart Ocean-Smart Industries: Next Steps

- **Develop pilot projects to put “Smart Ocean-Smart Industries” to work**
  - Country or company level focus, e.g. fleet level
  - Regional, e.g. Arctic
  - Parameters, e.g. ocean acidity, bathymetry
  - Extreme weather or ocean events, e.g. tsunamis
- Define value proposition / rationale for industry and science
- Inventory existing ships / platforms of opportunity programs
- Define the “menu of options” for voluntary observations
- Define interface requirements for platforms / payload
- Develop the principles, practice and platform for industry data sharing and access
- Increase investment on ocean observations technology through the WOC Ocean Investment Platform
Thank you

WOC 5th Sustainable Ocean Summit (SOS)
29 Nov-1 Dec 2017, Halifax, Canada

Paul Holthus, CEO
World Ocean Council
paul.holthus@oceancouncil.org

Oceancouncil.org