BW Planning and Compliance Efforts to meet IMO Requirements

4 Examples

Bryan Bjorndal
PBWG April 2017
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> 90% of Everything Manufactured is Shipped on the Ocean
Ballast Water is Proportional to Cargo Loaded
Ships’ Ballast Water: A Major Vector

- 5 to 7 billion tonnes per year
- 7000 species at any time
Gross Tonnage of Cargo and Number of Vessels

Now over 70,000 in the Global Commercial Fleet
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004

Ballast Water Management for Control of Nonindigenous Species in Waters of the United States 33 CFR 151, VGP 2013
Global treaty to halt invasive aquatic species to enter into force in 2017

Accession by Finland has triggered the entry into force of a key international measure for environmental protection that aims to stop the spread of potentially invasive aquatic species in ships' ballast water.

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) will enter into force on 8 September 2017, marking a landmark step towards halting the spread of invasive aquatic species, which can cause havoc for local ecosystems, affect biodiversity, and lead to substantial economic loss. Under the Convention's terms, ships will be required to manage their ballast water to remove, render harmless, or avoid the uptake or discharge of aquatic organisms and pathogens within ballast water and sediments.

"This is a truly significant milestone for the health of our planet," said IMO Secretary-General Kitack Lim. "The spread of invasive species has been recognized as one of the greatest threats to the ecological and the economic well-being of the planet. These species are causing enormous damage to biodiversity and the valuable natural riches of the earth upon which we depend. Invasive species also cause direct and indirect health effects and the damage to the environment is often irreversible," he said.

Her Excellency Ms. Päivi Lubomirski, Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Finland to IMO, handed over
Lack of Legislative Harmonization

- Causes confusion
- Undue complexity
- Not a level playing field
- Lack of trust
- Impacts capital costs
- Increases operational costs
- Instills fear due to uncertainty
- Severe hindrance to acceptance and implementation
IMO Technical Guidelines

- Guidelines for sediments reception facilities (G1)
- Guidelines for Ballast Water Sampling (G2)
- Guidelines for ballast water management equivalent compliance (G3)
- Guidelines for Ballast Water Management and Development of Ballast Water Management Plans (G4)
- Guidelines for ballast water reception facilities (G5)
- Guidelines for Ballast Water Exchange (G6)
- Guidelines for Risk Assessment under Regulation A-4 (G7)
- Guidelines for approval of Ballast Water Management Systems (G8)
- Procedure for Approval of BWM systems that make use of Active Substances (G9)
- Guidelines for approval and oversight of prototype ballast water treatment technology programmes (G10)
- Guidelines for Ballast Water Exchange Design and Construction Standards (G11)
- Guidelines for sediment control on ships (G12)
- Guidelines for additional measures including emergency situations (G13)
- Guidelines on designation of areas for ballast water exchange (G14)
- Guidelines on PSC under the BWM Convention

+ a number of resolutions, circulars, etc.
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**Marseilles, Toulon, Lorient**
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World-class facility and equipment gifted by AstraZeneca to the University in 2014
• Fate & Effects labs for Commercial Research Organisations
• Laboratory space & equipment for high growth companies
Certificate of Incorporation on becoming a Community Interest Company

Company No. 10291685

The Registrar of Companies for England and Wales hereby certifies that under the companies Act 2006:

CONSORTIUM FOR INVASIVE SPECIES MANAGEMENT
LBS LIMITED

having changed its name; is now a Community Interest Company; and is incorporated under the name of:

CONSORTIUM FOR INVASIVE SPECIES MANAGEMENT CIC

Given at Companies House on 17th August 2015

Company House
Draft-O rganizations
Brixham Environmental Hub

Mission Statement:
Recognizing the challenges of regulatory and statutes-setting organisations to be both the Educator and the Enforcer; the members agree to proactively measure and understand the effects of ballast water management, which include shipping operations, port state monitoring and enforcement, and environmental consequences. The members believe that positive sustainable practices and technologies exist today, and are in development; to address this marketplace.

- Multiple beneficiaries
- Environmental and maritime focus
- BW regulation implementation/optimization
- Project based collaborations
- Technology Innovation, Maritime Training, and Environmental Stewardship Objectives
- UK Agencies participate
- Grants and Proposals
- Innovate UK
- EU Projects and Proposals
- Workforce Education, Involvement

Consortium Members - initial list
- Assure Controls, (San Diego, US)
- Blue Tech Expert Team, (Brixham, UK)
- Gremco sas (Toulon, France)
- Blue Ballast Solutions (Toulon, Marseilles, France)
- Chelsea Technologies (London, UK)
- Plymouth University (Plymouth, UK)
- Mayor of Torbay (Torbay, UK)
- Business Services, Marine Services (Brixham Harbor)
- (MTS) Marine & Towage Services, (Brixham, UK)
- South Devon College
- Pole Mediterranean, (Toulon, Marseilles, France)
- The Maritime Alliance, (San Diego, US)
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**Organization of American States (OAS)**

- 2 confidential surveys
- Part 1 & 2, spaced by 60 days
- 35 Ports
- 15 Countries
- 4,830 (ave) vessel visits
- 4,140 (ave) size (TEUs)
- 85% not aware of IMO BWC
- 70% of those aware, had no BW plan
- 44% knew PSC was involved
- 22% felt ready for implementation

*PDF of Survey*
## Nigeria

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Presentation to Nigerian Ports Authority
February 7, 2017

National Maritime Authority and Nigerian Port Authority representatives

Our proposal being arranged by the IT department.
National Maritime Authority and Nigerian Port Authority

21 attendees

Our proposal

What will BTET do for the NPA?

- BTET will design an implementable BW management plan tailored to strictly suit the terrain, operational peculiarities and overall port management philosophies of the NPA.
- BTET will train NPA officials on the entire gamut of Ballast Water Management technologies including its administration.
- BTET will in conjunction with its Nigerian partners put in place a BW management system on a Private Partnership model with the NPA to kick start the operations.
- BTET will, as a development partner to the NPA in the BWM, ensure that all BW management systems put in place conform to international best practices and are readily available in the public domain for the benefit of port users and the entire maritime industry.
- BTET will help the NPA develop Ballast Water Management Regulations for the Control of Invasive Species in Nigerian Waters.
His Imperial Majesty
Ooni Adeyeye Enitan Ogunwusi
Ojaja II, Ooni of Ife

Historical visit to
United Kingdom

- Commonwealth Day Celebration
- Business Leaders Luncheon with Chambers of Commerce Leaders
- Visit to Nigeria High Commission, London
- Official visit to British Museum
- Visit to “The Black Cultural Archives”
- Performance of Moremi Opera by the Royal College of Music, London
- Visit to the House of Commons
- International Trade Development Discussions with MP’s and Business Leaders
- Lecture at Oxford University
- Visit to the old Royal Palace of the Queen Elizabeth
- 24th March, 2016: An Evening with Ooni of Ife (Gala Dinner & Awards Night) featuring Cultural Troupe, Yinka Ayefele & Royal DJ Nuff Jamz

enquiries: info@oonioffego.com  www.oonioffego.com
Rotimi Osobemekun (+44 744 816 4465)
Princess Dr. Toyin Kolade (Iyalaje of Apapa - Lagos)

Powered by: Ooni of Ife Global Outreach
Supported by: EGBE OMO IFE, United Kingdom
Lots of Factors in BW Implementation

Ambition to Engage

Capacity to Engage
Lots of Factors in BW Implementation
It’s About People  
(concept credit to Dr. Simon Gerrard, Southampton UK)
THANK YOU

Bryan Bjorndal
Assure Controls, Inc.

Bryan@assurecontrols.com
760.696.0300