



# WALLENIUS MARINE

Implementing Ballast Water Convention  
Sjöfartsseminarium

Göteborg, 2017-03-09



Per Tunell  
Head of Tonnage Operation

# OBJECTIVES WITH THIS PRESENTATION

## Objectives

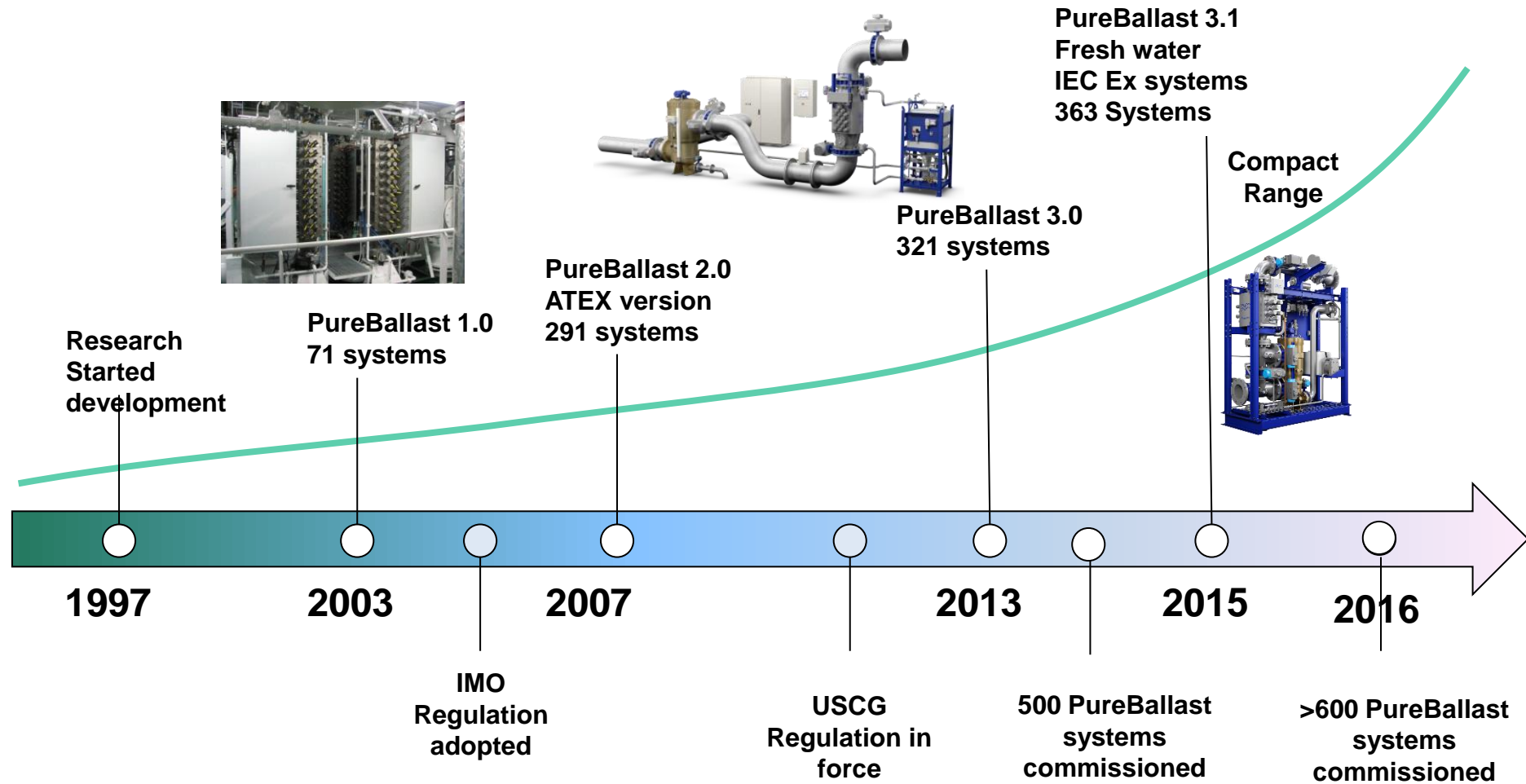
- Why install BWTS?
- What to consider when selecting system?
- When installed, then what?

# BASIC PRINCIPLES FOR OUR ENVIRONMENTAL WORK

- **Upstream solutions**
  - Act on the source
  - Not solve one problem by creating another
- **Broader responsibility**
  - Not just follow laws and regulations
- **Lobbying**
  - Ally with the right partners
  - Be a frontrunner – show what is possible
- **Small steps in the right direction**
  - Don't wait for the optimal solution
  - Developable – no dead ends!

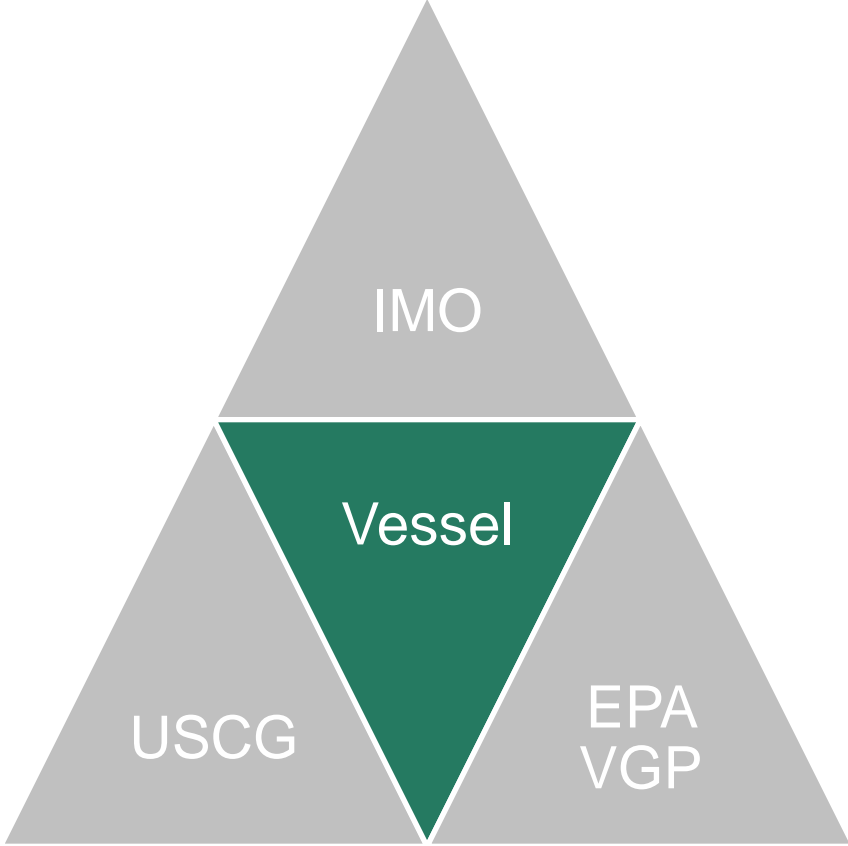


# PURE BALLAST DEVELOPMENT



# BALLAST WATER MANAGEMENT

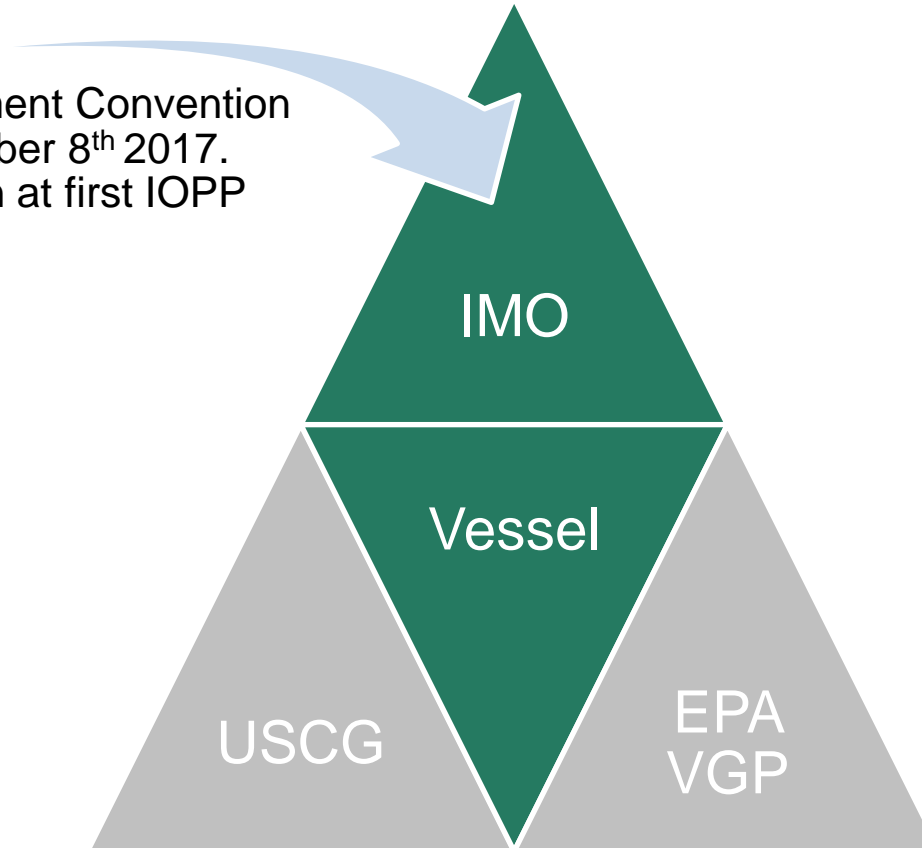
- WHEN & WHO TO COMPLY WITH



# BALLAST WATER MANAGEMENT

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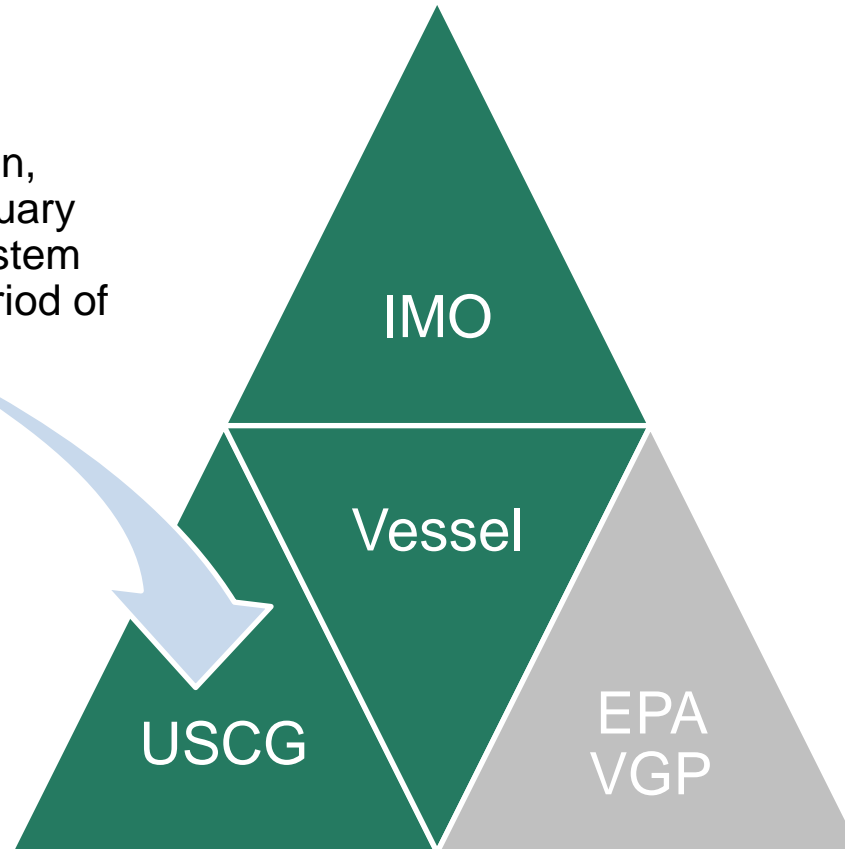
Ballast Water Management Convention enter into force September 8<sup>th</sup> 2017.  
BWT system installation at first IOPP renewal after Sep 2017.



# BALLAST WATER MANAGEMENT

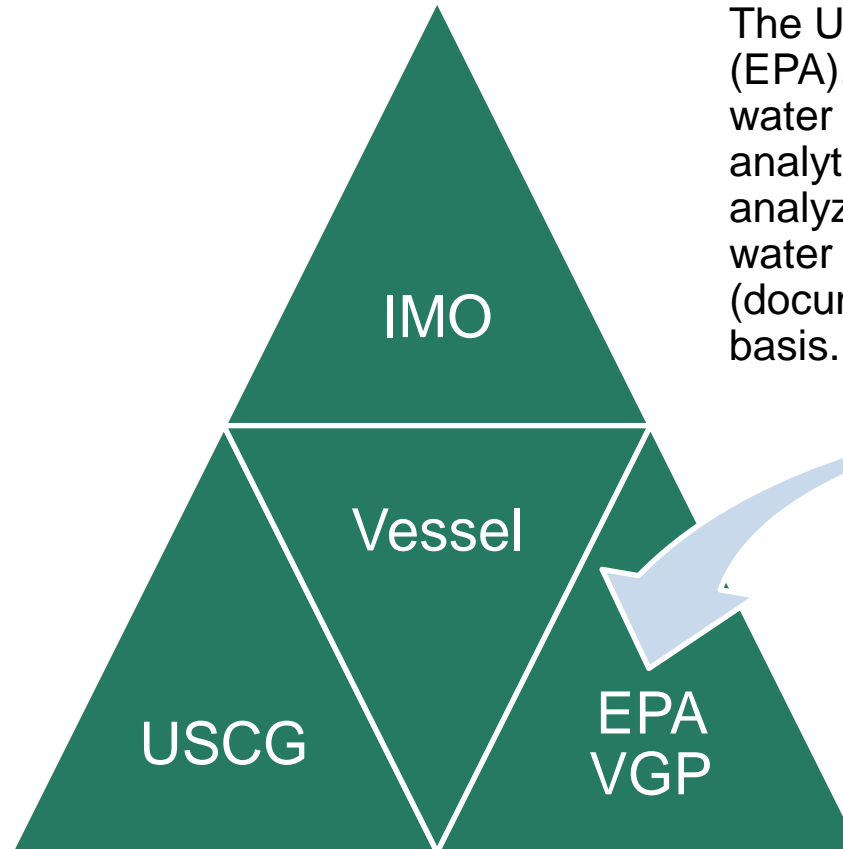
- WHEN & WHO TO COMPLY WITH

The United State Coast Guard Regulations. BWT system installation, first scheduled drydocking after January 1<sup>st</sup> 2016. Alternate Management System (AMS) can be used in an interim period of time.



# BALLAST WATER MANAGEMENT

- WHEN & WHO TO COMPLY WITH



The United State Environmental Protection Agency (EPA). If / when discharging treated (BWTS) ballast water in US waters we are obliged to conduct analytical monitoring per the VGP i.e. sampling and analyze\* on yearly basis (first year 2 samples). Also water ballast treatment systems shall be monitored (documented) by competent personnel on a yearly basis. All sensors shall be calibrated annually.

**Full compliance**

\*

- *Total heterotrophic bacteria,*
- *E. coli, and*
- *Enterococci*



# BALLAST WATER TREATMENT SYSTEMS

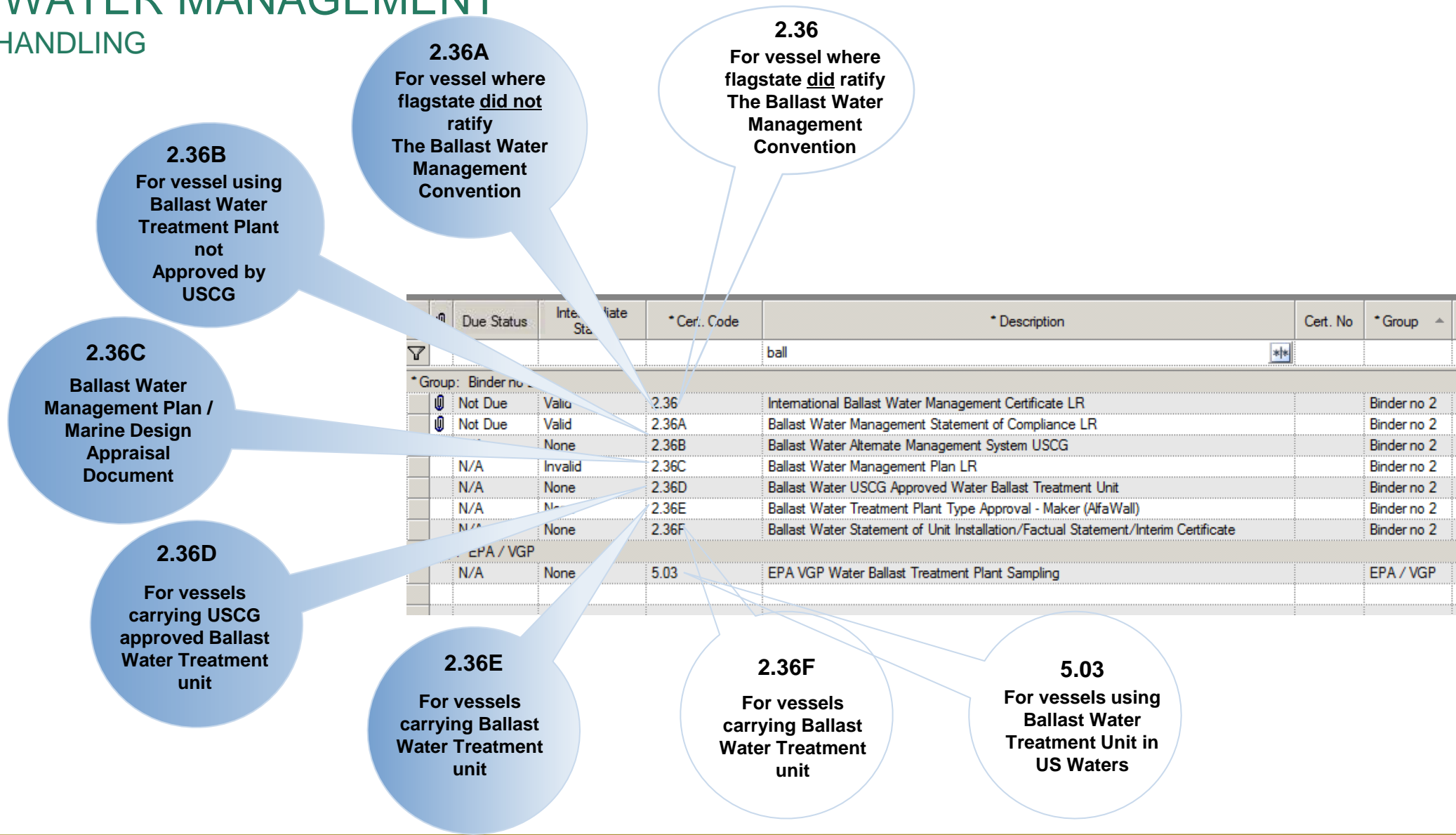
## - WHAT TO CONSIDER

- Installation
  - Size
  - Ease of installation
  - Type approvals
  - Cost
  - Availability
- Operation
  - Ease of use
  - Operational costs (energy consumption, chemicals, service)
  - Operational restrictions (salinity, temperature, holding time)
- Reliability
  - System reliability
  - Supplier reliability



# BALLAST WATER MANAGEMENT

## - DOCUMENT HANDLING



# BALLAST WATER MANAGEMENT

## - RESPONSIBILITIES ONBOARD

Used by Deck department, but placed with the Engine department

Clarify responsibilities when it comes to:

- Ensuring availability
- Maintenance
- Exercising the system (valves etc.)



# OBJECTIVES WITH THIS PRESENTATION

## Objectives

- Why install BWTS?
  - Reduce environmental footprint!
- What to consider when selecting system?
  - Installation
  - Operation
  - Reliability
- When installed, then what?
  - Get the formalities right
  - Clarify roles and responsibilities