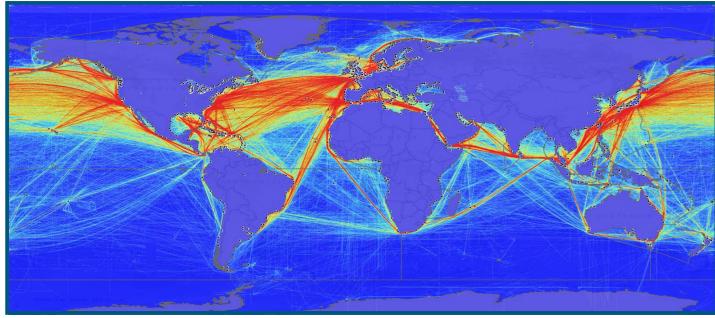






# **Delivering Improved Environmental Outcomes:**

# The Marine Biosecurity Initiative



**Global Shipping Route Intensities** 

#### The Issue

Ballast water is an essential component for the structural integrity and stability of modern ships when emptied or partially emptied of their load. It is defined by the International Maritime Organization (IMO) as "water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship".

While the use of ballast water is critical to maintaining the operational safety of ships, especially when unladen, discharges can cause significant economic, environmental and health implications. As ballast water is drawn into a ship's ballast tanks, organisms living in that water are also taken on board. This water therefore becomes "biotic"; the larvae and spores of marine animals can survive the long journeys taken by cargo ships. Many of these organisms remain alive inside the ballast tanks and are subsequently returned back to the sea when ballast water is discharged for stabilisation purposes. Any sediment which settles within the ballast tanks is removed manually, and returned to the sea over the side of the ship, or disposed of in shipyards and repair facilities during cleaning of the ballast tanks. Through this activity, organisms (including fish, crustaceans, molluscs, polychacetes & algae) are transported and released by ships into new environments where they are not indigenous. These organisms are referred to as **alien species**.

Depending upon the environmental conditions into which they are discharged, organisms may not only survive but establish themselves and become dominant. These organisms are referred to as **invasive alien species** (IAS), and are now globally recognised as one of the greatest threats to biodiversity. IAS have the potential to sufficiently affect ecosystems to the extent that serious economic, environmental and health implications occur.



**Existing Ballast Water Management Training Programmes** 

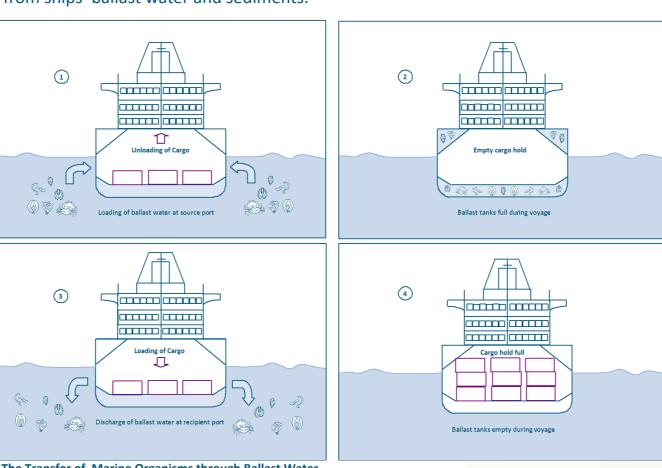
### The Convention

In 2004, the International Maritime Organization (IMO) adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments (the BWM Convention). The BWM Convention will come into force 12 months after ratification by 30 states, which represent 35 percent of the world merchant shipping tonnage.

Once the BWM Convention comes into force, member states will undertake to "prevent, minimise and ultimately eliminate the transfer of Harmful Aquatic Organisms and Pathogens (HAOP) through the control and management of ships ballast water and sediment". Member states have the right to take more stringent measures consistent with international law, ensuring practices do not cause greater harm than they prevent, to their environment, human health, property or resource, or those of other states.

#### Aim of the Initiative

To build capacities in developing countries to address the transfer of invasive species from ships' ballast water and sediments.



The Transfer of Marine Organisms through Ballast Wate

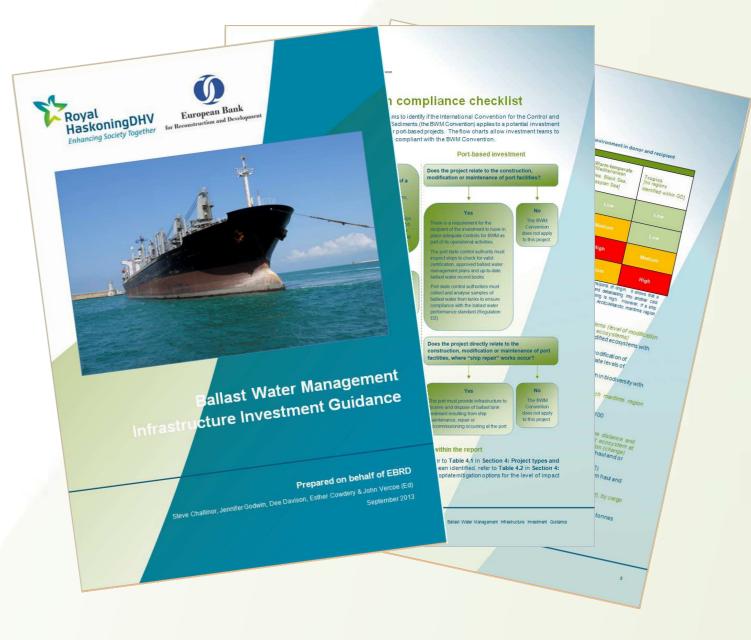
## The Workshops

The European Bank for Reconstruction and Development (EBRD), the International Maritime Organisation (IMO) and the GEF-UNDP-IMO GloBallast Partnerships have come together to deliver a number of capacity building activities for ships' Ballast Water Management within the shipping and port industry sectors in selected countries. These highly successful Ballast Water Management (BWM) workshops have been undertaken in Ukraine, Russia, Turkey and Georgia.

The training focussed on specific aspects of BWM from each of the perspectives of ports authorities, port state control, maritime administrations, shipping industry, technology providers and reception facility operators.

Each training programme has been organised to involve local government authorities where possible.

# A Partnership between EBRD, GloBallast & Royal HaskoningDHV



### **The Guidance Document**

On behalf of the European Bank for Reconstruction and Development (EBRD), Royal HaskoningDHV have produced guidance for Ballast Water Management (BWM) Infrastructure Investments. The guidance provides information and an assessment of the potential inclusion of BWM infrastructure within a broader financial investment. The guidance identifies whether, and how, a given project will be subject to the requirements of the BWM Convention and enables investment teams to identify and appraise practical and viable BWM implementation measures to be incorporated into an overall Financial Investment Decision (FID).

