Ballast Water Opportunity Newsletter 2010-2, 1 July 2010

Introduction

The BWO Newsletter 2010/2 briefs on recent events and developments in the project. By now the project is well up and running on many aspects, while some others need yet further development before being in full flight.

WP1 - The project as a whole

The project extension has been granted by the Interreg IVB North Sea Region Programme (NSRP). Hence our partnership will be expanded by three new beneficiaries, Kerstin Stelzer from Brockmann Consult (Germany), Philip Mathuis from Visio Imaging Systems (Belgium) and Professor Ehsan Mesbahi from the University of New-Castle (United Kingdom).

In September we hope to meet the new partners at NIOZ where we will also meet the people from the Interreg NSRP Secretariat that are handling our project. During the meeting we will also look into compliance enforcement from various perspectives, such as scientific, technological, policy, legislation and inspection and into the dissemination framework of the project and the implementation thereof.

WP 2 Policy

In the past two months WP2 continued working on the topics introduced in the last newsletter, primarily in small groups.

Highlight of the past period was a workshop held in Hamburg on the 16th of June focussing on the Implementation of the Ballast Water Management Convention. Leading policymakers and scientists from around the North Sea Region presented case studies on the implementation processes in their countries. Henrik Ramstedt of Sweden and Dick Brus of the Netherlands gave rare insights into the national ratification process. Daniel Masson focused on the threat to Aquaculture, which was one of the drivers in the French accession to the Convention. Brian Elliott of the European Maritime Safety Agency presented a summary of EMSA's efforts to grapple with difficult enforcement questions of the convention. Cato ten Hallers provided valuable input on how to improve public and stake holder awareness of the Convention. The power-point presentations of the workshop are available at: *Folders / Northsea Ballast Water / WP2 Policy / Policy Workshop Presentations / National Implementation Workshop 16062010*. Ulrik Berggreen of Denmark drew attention to the specific challenge in BWM for fish meal vessels, where ballast water during voyage risks to get contaminated by liquids from stored fish.

The following day the North Sea Ballast Water Exchange and Exemptions Group met at the BSH in Hamburg to further discuss options for ballast water exchange zones and the exemptions regime in the North Sea.

WP 3 Science - Testing

The past few months have been filled with activities at the pilot test bed of the Royal Netherlands Institute for Sea Research. A German-based company successfully completed a full test series of a full-scale ballast water treatment installation under rather extreme conditions. Because of the long and cold winter, water conditions were rather unfavourable, low temperatures and high sediment concentrations. Nevertheless their system, based on a combination of filters and an UV-reactor, performed well. Interestingly enough, as testing was done at fixed moments of the tidal cycle; some tests were carried out in the very dark hours of the night. As long as sufficient coffee was present most of the ones participating were in a good mood, despite the cold and often wet harbour area.

A second full scale BWT system, originating from Greece, also completed successfully a full test series. This system is based on electrolysis, but unlike most other systems it is designed for smaller ship, running at a flow rate of less than 200 m3/h.

Synchronously several pilot studies were done, which included the testing of different types of primary and secondary filters as well as full-system and disinfection studies. We found that the typical estuarine waters of the Wadden Sea are far more challenging than usually perceived. Although the sediment mostly consists of clay particles (diameter less than 2 micron), the filters, even those with a pore size of 50 micron or larger are often entirely clogged. The presence of the gelatinous phytoplankter Phaeocystis certainly increases the challenge to filter capacities. Such water conditions are commonly found in coastal areas and are certainly not exceptional for the coastal waters of the North Sea.

In the past period NIOZ also hosted a detection exercise, for which detection experts of different background were invited. The exercise preludes on a more extensive detection workshop to be held during the late September Interreg meeting. The presentations of the detection exercise can be found at the project web site NorthSeaBallast.eu, */ Folders / Northsea Ballast Water / WP4 Sampling / Detection Exercise, NIOZ, 16/06/2010.*

WP 4 Science - Sampling

As a major activity we developed a ballast water management risk assessment scenario for the North Sea region, focusing on intra-North Sea shipping. In a 48 page document we evaluated the three different risk assessment approaches of the IMO-BWM Guideline G7 for applicability in the region. Quite some essential data for species-specific and target-species risk assessment (such as those about already introduced species in North Sea ports) are missing. Thorough port baseline surveys have yet to be done. Notwithstanding the lack of data, a process to select target species may be performed using selection criteria as outlined in the document. A risk assessment based upon environmental matching is also possible; for such approach water salinity is the key feature. It is possible to combine a target-species approach with environmental matching. Presence of the selected target species in the ballast water donor area together with matching salinities of the ballast water donor and the recipient ports pose a high risk. If the salinities of source and recipient ports mismatch, the ballast water poses a low risk.

Selected technologies to demonstrate compliance with the ballast water standards of the BWM Convention were tested during two shipping voyages. Travel and material expenses for the additional experiments were covered from outside sources.

WP 5 Strategies

Work Package 5 deals with Strategies for the future management of invasive species distributed through ballast water. World Maritime University (WMU) is the principle partner in this work. The efforts so far have been focusing on gathering data on critical invasive species in the North Sea, their patterns of invasions, key ecological features and the management aspects of such organisms in terms of ballast water treatment. To facilitate this work, aspects of previously collected information gathered in websites such as DAISIE (www.europe-aliens.org) has to be modified to fit into the WMU/BWO website under construction. Also data from other websites such as the Baltic Sea website and the NOBANIS (www.nobanis.org) are modified to fit into the new website. For that purpose WMU is organising regional cohesion meetings with the experts in charge of the databases. Other work in progress includes the hydrodynamic model for bio-invasions in the North Sea, in conjunction with DHI in Denmark. Furthermore a few publications are being prepared describing the innovative aspects of the new WMU/BWO website, articles analysing likely future invaders by comparing the North Sea with eco-regions that have similar characteristics as the North Sea, and an article describing the principle characteristics of a ballast water tank survivor.

WP 6 Dissemination

During the last few months the WP6 team extensively redrafted the project work programme so as to link any scheduled delivery with dissemination moments, targets and opportunities, setting clear delivery dates as a focus for dissemination. The prime aim is to raise awareness of the opportunities, options and benefits of communication and dissemination in liaison with project deliveries for the benefit of all project participants. So far the project dissemination, such as communication, publicity, organisation of targeted events, has received limited attention from the project participants. In this first phase the project participants choose to focus primarily on activities of content, be it policy, science or technology. Dissemination in all its aspects is however the binding glue within the project and an excellent means to motivate and stimulate the project participants from al different target groups. So far not all target groups appear to feel truly at home within the project. Focusing on spreading the word whilst underpinning the benefits of the project can assist in offering a home within the project space for all project participants. The dissemination planning schedule will now be circulated to the Work Package leaders and will also be one of the topics at the Interreg meeting in September (two days during the week of 21-25 September, NIOZ, Texel).

In May the project has been presented twice to a wider audience: once at the IMarEST Ballast Water expert Group (14 May, London) and at the ACI 3rd Ballast Water Conference (19-20 May, London). The presentations are at the public pages of the BWO web site (www.NorthSeaBallast.eu) (*/My Public Pages / Welcome to the Ballast Water Opportunity project / Project Output / Output 2010 / NSBWO Project Presentations)* . At ACI also the lecture: 'Investing in Ballast Water Management systems for the Future: The need for Innovation' was presented: (*/ Folders / Northsea Ballast Water / WP6 Dissemination / Presentations - NSBWO / 2010-Presentations by NSBWO participants / International Conferences Other 2010).*

A briefing on Dissemination targets was given at the National Implementation workshop (May 16, Hamburg; for link see WP2, this Newsletter).