

Ballast Water Opportunity Newsletter 2010-1, May 2010

Introduction

This first Newsletter after the 2010 Annual Meeting (AC10) covers a somewhat larger time span than normally. AC10 demarcated the period of the first year of the project, a year that saw success as well as some delays, while uncertainty over the reporting requirements that had changed during the year remained.

The presentations of the AC10 are available at the project web site (www.Northseaballast.eu) for those who have registered at the site. Location:

[/ Folders / Northsea Ballast Water / WP6 Dissemination / Presentations - NSBWO / 2010-Presentations by NSBWO participants / Presentations BWO Annual meeting 2010](#)

The project as a whole

The AC10, hosted by partner World Maritime University (WMU) in Malmo, Sweden, 29 & 30 January 2010, offered a platform for discussing both the results of the first year and presenting the plans for the coming year, to be discussed in simultaneous workshops. The Project Steering Board evaluated progress and future planning and voted on continuation of the developed strategy.

The Steering Board vote and the closing remarks by the Chair are at the web site (www.Northseaballast.eu) home page, under project meetings.

As to the project progress, the Steering Board Chair noted that many participants had been confused as several sub partners and partners had as yet to gauge their role and place in the project. The uncertainty is expected to be resolved in the next year as all major partners are now finally moving at appreciable speed.

Apart from the next year's programme the meeting discussed a proposal for a project extension, inviting the University of Newcastle, Det Norske Veritas (DNV) and Brockman consultancy to the project. The Steering Board accepted the proposal on the condition that the activities of BWO should be well aligned with those of EMSA, as both are focusing on sampling and compliance enforcement. The Ballast Water Opportunity beneficiaries and EMSA are to discuss their co-operation, the alignment of their activities and the demarcation between them in more detail in the coming period.

In the proposed extension as submitted to Interreg (April 2010) the University of Newcastle, Brockman Consultancy and Ovisio Imaging Systems (development of detection technology, Be) will join the project. The extension focuses on stimulating development of detection and monitoring technologies. DNV could not timely confirm their participation. We hope to know the outcome whether they can join us by June.

WP 2 Policy

The past months have been eventful for WP2. with much work undertaken in small workgroups. This quite efficient approach is however, somewhat hidden from the other partners' eye. To improve visibility we will try and outline the main WP2 activities briefly. Most activities below were also presented at the AC10.

UV scaling – With the tremendous help of Edmund Hughes of the Marine Coast Guard Agency (MCA), UK, Geir Hovik Hansen of the Norwegian Maritime Directorate, and Jad Mouad from DNV, Norway and his working group, a paper on the scaling of UV-based BW treatment systems was developed and submitted jointly by the UK, Germany and Norway to BLG 14. The BW working group at BLG 14 while appreciating the paper advised on further development. At present this is the only paper offering guidance to administrations and hence likely to serve as a basis for decision by administrations on the issue.

North Sea Ballast Water Exchange and Exemptions – Dick Brus of the Dutch Ministry for Transport is co-ordinating a group developing a strategy for BW exchange and the issuance of BW exemptions for voyages within the North Sea. The group integrates information from the NSBWO project, an ESA-funded research project to use satellite imaging to identify the risk of BW exchange, and the earlier committed Ballast Water Scoping Study.

Human health in ballast water treatment – At the Federal Institute for Risk Assessment in Germany (BfR), Dr. Werschkun and Dr. Sommer are investigating human health aspects of BW treatment, with a focus on the assessment of by-products and the Human Exposure Scenario. Potential contributors are invited to contact Dr. Werschkun or Dr. Sommer .

Environmental aspects – The Federal Environment Agency (UBA) evaluates the environmental testing and risk assessment in the approval process for ballast water treatment system (BWTS). Dr. Wiek focuses on identifying substances of concern for chemical analysis, on standardisation of ecotoxicological tests and on emission scenarios. Dr. Wiek welcomes input from other project partners.

Application date of the BWMC – The University of Kiel developed a legal analysis of the applicability of the BWMC. The presentation is considered for submission to IMO.

Application dossiers – Dr. Behrends of Marena Ltd. is leading the efforts to develop a practical guidance for BWTS manufacturers to ease the submission process to the GESAMP Ballast Water Working Group.

Ballast Water Management Plan – Dr. Voigt of Hamann AG has been developing a generic BW operations manual. He was ideally placed to undertake this task, also being involved in national (DIN) and international (ISO) standardisation efforts. Unfortunately Dr. Voigt changed companies and is no longer available for the project. If you would like to work on this subject, please contact Kai Trümpler at the Federal Maritime and Hydrographic Agency (kai.truempler@bsh.de) .

WP2 also looks for partners to work on scaling of electrolysis systems and the further development of a generic BW management plan. Again, if you are interested in leading the work or in contributing to it, please contact Kai Trümpler.

WP 3 Science - Testing

In the winter period there was no active testing of complete or partial Ballast Water Treatment systems in the NIOZ harbour. The strong winds and extremely cold weather were not exactly favourable conditions to conduct field experiments, while the harbour also runs a risk of becoming flooded by high waters.

The season was well used for analysing old samples and writing reports and papers about the previous tests. New contacts were established with a number of manufacturers developing different types of BWT systems. We also met with a Belgian company constructing a new tool for visualisation of (micro)organisms in real time. This tool may be suitable for monitoring small organisms for compliance enforcement.

The results of the first year's tests and experiments were presented at different meetings in Malmo (Sweden) during three different events, including our annual meeting (/ [Folders / Northsea Ballast Water / WP6 Dissemination / Presentations - NSBWO / 2010-Presentations by NSBWO participants /](#))

. The test methods developed and the technologies applied in the first year of this project provide a good and detailed insight of the remaining numbers and the viability status of organisms present after treatment. Most of the tools can be applied for different BWT technologies. Nevertheless ongoing research will be needed for improvement and development of alternatives in particular in view of upcoming requests for compliance enforcement. Test results also showed that the efficacy of the present generation of BWT systems is well able to meet the IMO D2-Standard and is often up to ten-fold below.

After the long and cold winter period testing activities have started again in the NIOZ harbour. The first company to start new test runs was a German/Swiss company (Aquaworx). After considerable research and technical improvement they started testing an entirely new concept of a BWT system consisting of a filter and UV-reactor. At the same time EMRA-First (Greece) started testing their pilot test plant, based on a separator and chlorine treatment. As spring is approaching rapidly, soon more BWT systems or components thereof will arrive and the test site will be a busy place teeming with activities.

WP 4 Science - Sampling

A comprehensive list of alien species in the North Sea region, prepared during the last reporting period, was updated on a regular basis. As new alien species continue to be reported and earlier introduced species are spreading, this activity will be ongoing.

BWO was announced at national and international meetings in France, Germany, Greece, The Netherlands, Portugal, Spain, Sweden and the United Kingdom, while the project flyer was circulated. The meeting attendance ensures up-to-date information regarding the work of WP 4 and its objectives and enables project dissemination.

The majority of the work was spent to continue to screen and test suitable organism detection technologies on-board vessels. Travel costs for these additional experiments and also the material needed was covered from other financial sources.

Detection technologies for selected organism, in particular indicator microbes, as listed in IMO Regulation D-2, were tested at sea during five voyages on commercial vessels undertaken to test the performance of ballast water treatment systems. In another experiment a long-term measurement on viability of algae was undertaken. The instrument used for this experiment is a Pulse-Amplitude Modulated fluorometer (PAM) detection device. Two such devices are available in BWO which enabled a comparison between both systems.

WP 5 Strategies

Preceding to the BWO Annual Meeting, hosted by WMU, WMU hosted a series of three BWM research and development events, co-organised by GloBallast, the WMU and the Ballast Water Opportunity project:

- Workshop on harmonisation of BWM test facilities
- Workshop on evaluating performance of emerging ballast water management systems
- Global R&D Forum Conference of emerging BWM systems

Papers presented by BWO partners are to be found at the website (see introduction), under '2010-presentations by NSBWO participants/'

The full set of papers of the Global R&D Forum are under 'Policy, scientific and guidance documents/conference papers/Conference Papers'.

WP 6 Dissemination

The project has received steadily increasing attention, which is reflected by invitations to present the project at conferences and seminars, by requests for interviews by the specialised press and by general news media, by the many that contact the project either through the project web site or through the WP 6 coordinator, by being frequently approached for specific requests as well as by words of praise for the project and for its web site expressed in public meetings. The web site's protected environment is frequently visited by a varied public.

In the autumn 2009, the project was presented on invitation at:

IMarEST Presidents Day (London, 13/10); SOWOS Conference (Hamburg, 13/11); Lloyds List BWM R&D Conference (London, 8 & 9/12). Two more invited presentations will be held in May 2010. Several press interviews were given, both in 2009 and 2010. The presentations and press responses are at the web site, home page, Project output/.

Project partners are increasingly approached for giving specialist contributions and for participating in expert groups .

We are also actively exploring contacts at any event we attend as well as off the record. Contacts on an EU level have further developed, in particular with EMSA, and recently also with the permanent EU representative at IMO.

Last October we circulated a target group-oriented inventorying questionnaire, to partners, sub partners (approached per target group, such as shipping, ports, policy and so on and so forth). The responses have been summarised and sometimes led to further exchange of ideas, as with partners from ports. Increasingly contacts with non-partners from important target communities have been established as well. For the questionnaire we now seek to follow up with a more specific suite of questions, to be developed with the help of experts from target groups .

The web site is regularly updated with both project products and output as well as with relevant information on ballast water management and related issues.

A flyer was first disseminated at the AC10 and since has been disseminated widely by project partners.

The dissemination planning is in the process of being developed in more detail, with a view to stimulate early involvement of project (sub)partners in timely defining an effective and elegant dissemination strategy for their work package, with full involvement of WP6 from the onset.