

Atlantic Blue Ports Newsletter #7

May 2021

The Atlantic Blue Ports project aims to improve the port based services for the discharge and treatment of ships effluents including oil and ballast water. The project's goal is to create awareness and motivation to stop discharge at sea using the Atlantic Area as a support platform to prototype, test, demonstrate and communicate activities. The project has gathered together a consortium of 28 partners and associated stakeholders representing ports, PRF operators, public authorities, SMEs and universities from across the Atlantic Area.

For more information on the project, its aims and objectives, achievements and partners please visit www.blueportservices.com

Newsletter Overview

Outcome of Searica meeting 10th December 2020

Damen's InvaSave mobile ballast water treatment system update

Port of Brest: When sea water monitoring serves shipping and port operations

Micfil Ultrafine Filter Systems delivering environmental benefits

Beyond Blue Ports

European Maritime Day May 2021

Join us via our interest group

Outcome of Searica meeting 10th December 2020

INTERGROUP
SEAS, RIVERS, ISLANDS
AND COASTAL AREAS



On 10th December 2020, a working session was organised by the group Searica, from the European Parliament, the Atlantic Blue Ports consortium and the Conference of Peripheral Maritime Region (CPMR) to discuss the findings and recommendations from the Blue Ports project.

After introductions regarding the role of Searica to identify improvement schemes for EU regulations and policy to implement the protection of the marine environment from shipping and port pollutants, the audience split into three virtual round table groups to discuss the three main themes covered by @Blueports:

- Facilitation of the implementation of the IMO Ballast Water Convention
- Monitoring and protection of sea water in ports
- Fostering the development of cutting edge port services for ships effluents

The outcome of the three sessions were as follows:

Round Table 1: Facilitating the implementation of the IMO Ballast Water Convention

The IMO BWMC entered into force on 10 September 2017 (10 days after the start of the project). Its implementation raises technical, economic and environmental issues that EU Member State face individually. Coordination between Member States would facilitate a harmonious implementation of the Convention in Europe. This requires support from EU institutions. EMSA representatives (M. Herbert and Helliott) proposed their support to define actions EMSA could engage, as for other operational issues such as maritime surveillance.

Round Table 2: Monitoring and protection sea water in ports

Protection of sea water is a core objective of the European Union. The Green Deal promotes further development of ocean monitoring networks and increased use of scientific data. In ports monitoring and protecting marine water quality remains a challenge. It requires specific facilities and funds they do not necessarily have.

Various @Blueport partners introduced their activities, results and views on further actions. The DG Mare proposed to pursue the exchange of cooperation actions that could be engaged with support of EU programs.

Round Table 3: Fostering the development of cutting edge port services for ship effluents

The European Port Reception Facility Directive (PRFD) has been revised in 2018 to cover the management of new effluents and growing volumes of waste. The Green Deal policy and its circular economy objective ask for further technical and economic innovation to enable reusing ships effluents. It also requires innovative financial schemes to ensure sustainability and attractiveness of treatment services as well as of a circular economy for ships effluents.

Find out more about Searica and the session at: <http://www.searica.eu/2020-2024/events-2019-2024/managing-ships-effluents-in-the-context-of-the-european-green-deal>

And CPMR: <https://cpmr.org/>

Damen's InvaSave Ballast Water Treatment System update



Damen InvaSave ©Damen

InvaSave is a mobile ballast water treatment system which is presented in the form of a standard shipping container which can be placed close to a ship, either on the quay or on a barge or truck. The water pumped from the ship into the ballast tank is treated with high density UV to destroy the micro-organisms, in accordance with the International Convention on ballast water management.

As part of the 'Blue Ports' project, the Damen InvaSave 300 has carried out tests in the ports of Las Palmas in the Canary Islands, Lisbon, Gijon and Brest. Videos of the testing in the various ports can be viewed [here](#). Details of the testing in these ports can be found in earlier issues of the Atlantic Blue Ports Newsletters on the project website [here](#).

The InvaSave container has now returned to Gorinchem in the Netherlands and Damen has recently reported that Climate Investor Two has approved an investment that could amount to €24.5 million to support the lease of InvaSave in Africa, Asia and Latin America.

Climate Investor Two is a financing facility mandated to invest in water, sanitation and ocean infrastructure projects in emerging economies. The organisation is supported by the EU and Dutch Fund for Climate and Development.

The project concerns the treatment of ballast water, which is taken on in great quantities by marine vessels to offset unloaded cargo or waste, before being discharged at the ship's next port of call. This discharge typically contains a multitude of viruses, bacteria, and other biological materials, including plants and animals collectively referred to as invasive species. The inadvertent release of non-native and nuisance species in ballast water has already triggered extensive ecological damage, with a knock-on effect on the economy and human health and is one of the key concerns of the Blue Ports project.

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) came into force in 2017, with the goal of ending the spread of harmful aquatic organisms from one region to another. As of July 2020, 87 out of 217 countries have signed the higher standards and procedures for the

management of ships' ballast water, representing more than 80 percent of the world's merchant shipping tonnage.

The Damen containerised ballast water treatment system InvaSave is currently the only one to be certified by the International Maritime Organisation, which is responsible for the implementation of the BWM convention. During the commercial phase, it is estimated that the systems will treat up to 36,000 m³ of ballast water per day. Not only with InvaSave contribute towards climate adaptation and the preservation of marine ecosystems, it is also estimated that up to 240 jobs will be created locally in Africa, Asia and Latin America.

For more information visit www.damen.com

Port of Brest: When sea water monitoring serves shipping and port operations

The Atlantic Blue Ports project aims to reduce and better manage accidental or 'regular' pollution induced by maritime transport, especially in port areas. In the port of Brest, **tidal currents** are the main cause of diffusion of pollutants. They are also critical for navigation and port operations.



Until now this type of data has not been available for the Brest port area. The Chamber of Commerce of Brest (port operator and coordinator of Blue Ports) and the 'Shom' (French hydrographic office) have recently collaborated to develop a high resolution tidal current model covering the entire shipping zone from the entry of the bay of Brest channel to the commercial port.

By using the new S-100 standard, different types of data, including time varying data such as tidal currents, can be displayed on navigational charts via the regular ECDIS¹ terminals used on board vessels, by the harbor master and the maritime pilots. The envisaged tide current model would offer a very fine spatial and temporal resolution with a mesh size about 30m and a refresh time of just 15 minutes. This means that land and maritime users, including the port operator, harbour master, pilots and maritime community will have access to an electronic near-real-time atlas of tidal currents that is

accurate, reliable and exploitable to many uses including environmental management, port operations and navigation.

This data can be downloaded from Shom's public portal (<https://data.shom.fr>) and will eventually be transmitted as a continuous stream to the users' terminal. This represents an important step forward in the digitalization of ports and shipping as well.

The future

Driven by strict environmental and safety policies, ports are developing increasingly sophisticated means of monitoring that will support the management of both the environment and port activities. Digital techniques are required to better assimilate and exploit growing volumes of data of various types and formats. The work done in the Blue Ports Project by Shom, the Port of Brest, SeaTopic and the Brittany Region will lead to a review of the approach, currently sector-based, between environmental management and services for navigation and port operations, based on an international standard (S-100 from IHO).

Much data is common to both requirements (oceanography, hydrography, meteorology, AIS, etc.). A big portion is managed by third party operators (national hydrographical/ meteorological services, research institutes etc.). The port is increasingly becoming a hub for the exploitation of this data.

Beyond the Blue Ports Project, the objective is now to provide a unified management tool for marine data which can be used for multiple purposes; environmental management, port operations and navigation.

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Micfil Ultrafine Filter Systems delivering environmental benefits



Image ©Micfil

The Blue Port Services project partners received a presentation from Captain Alexander Proch at their March 2021 steering group meeting. The Micfil Ultrafine Filter Systems, which are made in Germany, filter out waters and abrasive particles from oil and fuel. The filtration performance can be up to 20x higher than standard filters and can remove dirt, combustion, oxidation, bacteria and abrasion particles down to

approximately 0.5 microns. Of interest to the Blue Port Services project is the fact that the units are modular in design, can be used in a mobile capacity on site, in the ship, bilge or water cleaning process. The filter will remove all oils from bilge and ballast water as well as 98% of bacteria and invasive species.

For more information visit www.micfil.com or contact info@micfil.com

Beyond Blue Ports

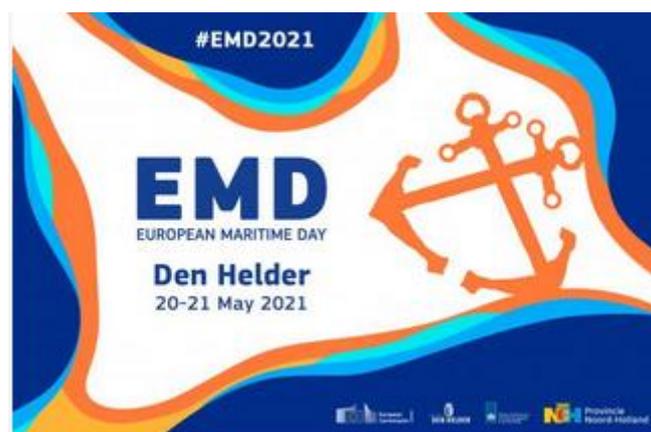
Atlantic Blue Ports as a project comes to an end in September 2021. Between 2017 and 2021 the project activities have interested numerous individuals and organisations under the specific topics of technologies (treatment processes of ships effluents), environment (monitoring and protecting sea water), regulation (ballast water, EU PRF directive, EU water framework directive) and sustainable economy of the whole. Over 200 members have joined the Interest Group and follow-up actions are being considered.

The project is keen that the Interest Group should not disappear after September 2021 and a Blue Ports Network will be launched at the end of the Blue Ports Project.

The goal will be to continue the work through analysis and research, contribution and networking with European and National decision makers, follow-up development projects to address research, investment and new economic activity sectors including sustainable maritime transport that is cleaner, smarter and collaborative.

Details of the new group are being worked on and we will launch the new network in the next newsletter. Watch this space! Everyone will be warmly welcomed to join.

European Maritime Day May 2021



Blue Ports will be present at the European Maritime Day 2021, even though it will be held virtually. The consortium will be available for B2B meetings to talk the project results and future actions. Please get in touch with Blue Ports to make an appointment. Join us at <https://european-maritime-day-2021.b2match.io/> Key word: "Blue Ports"

Contact us / join us

The project partners have created an interest group for anyone interested in the project. Joining the group is not engaging: any organisation can join to monitor the activities, to contribute to the studies of the Interest Group or to ask for implementing more concrete actions such as tests, recommendations to the IMO and EU decision making bodies, or to submit any idea that would help implementing the EU and international regulations related to ship effluents and waste. Join the interest group [here](#).

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Project Partners:



Partnership

