

## Real Ballast Facts Bulletin

Issue #09, 03 February 2023

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### BEMA in Action at the IMO

MEPC 79 was the first time that the #ballastgeeks were in the room “where it happens” as IMO has finally been able to return to in-person meetings. With critical issues like ballasting in ports with challenging water quality (PCWQ), updating the ballast water record book for clarity and consistency, and the tricky question of whether ships in zero-discharge areas can use their ballast tanks to store grey water being brought to the floor, the BEMA team was ready to make sure that the conversation stayed focused on holistic solutions, not just blaming the problems on the systems.

As we look at the outcomes, and most importantly as we look at the other work of the IMO in the ballast water world, BEMA is already getting ready for what comes next. In April, there is a meeting of the Pollution Prevention and Response Subcommittee (PPR10) and the next MEPC 80 meeting is already scheduled for July 2023. Hot on the list of topics that BEMA is tracking and preparing to submit papers on is how to streamline the approval process for existing BWMS that wish to incorporate changes to their design for improvements or equipment obsolescence, urging port states to begin using random sampling and compliance monitoring tools to determine whether or not systems are complaint with the D-2 standard, and helping to highlight the critical nature of installation, crew training, and proper maintenance to the question of how systems are operating in PCWQ situations.

BEMA wants you to be a part of formulating our plans and our positions. We take our role as the voice of the industry very seriously, but we cannot be YOUR voice unless you connect with us. Why not join BEMA? Membership is inexpensive and easy to apply for.

Email the External Affairs Committee Chair at [external-affairs@bwema.org](mailto:external-affairs@bwema.org) if you want to find out more!

### Regulation Updates & Info

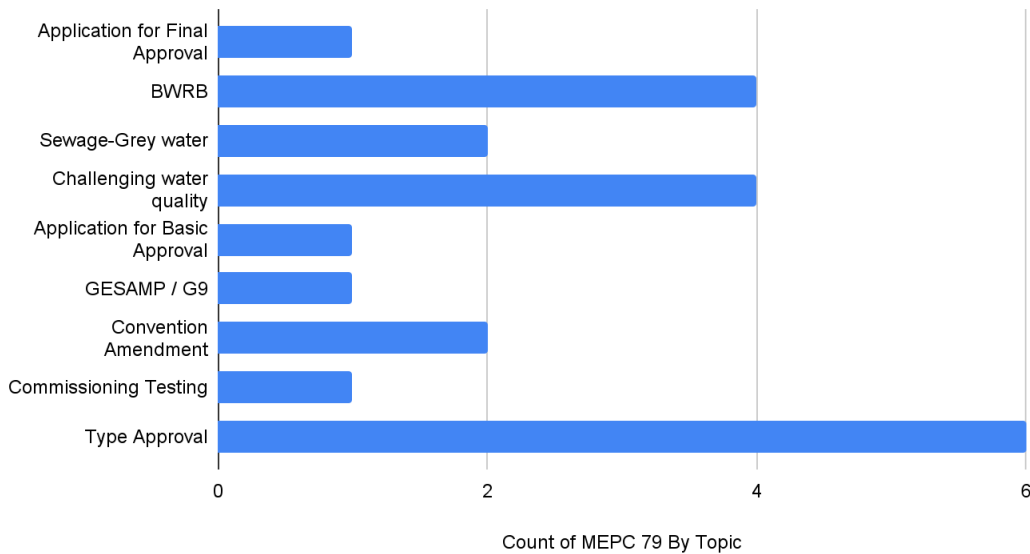
#### ★ IMO UPDATES

#### Summary of MEPC 79

When the IMO resumed in-person meetings at MEPC 79, the #BallastGeeks were there and ready to take part in the proceedings. The seventy-ninth session of the Marine Environment Protection Committee was held from Monday, December 12<sup>th</sup> to Friday, December 16<sup>th</sup>, 2022 at IMO Headquarters. BEMA submitted our second paper to the IMO (MEPC 79/4/12), co-sponsored by INTERCARGO, regarding ships operating in ports with challenging water quality. Additionally, BEMA co-sponsored a paper led by Japan, together with co-sponsors India, the United Arab Emirates, ICS, and BIMCO. This submission is published as MEPC 79/4/11.

There were twenty-three (23) documents listed under the crowded Agenda Item 4 HARMFUL AQUATIC ORGANISMS IN BALLAST WATER and/or are relevant documents related to ballast water which caused conversations to go late in to the evenings most days. The papers broke down along a couple of themes (see figure below) but due to time constraints and the urgency of the issues for the regulated community, the group focused most of the time on dealing with issues relating to the ballast water record book.

### Outline of MEPC 79 Agenda item 4



Following the extensive conversations and negotiations, the ballast water working group was able to agree on a number of key outcomes:

- The BWRG expressed the opinion that the BWM Convention does not preclude the temporary storage of grey water or treated sewage in ballast tanks, and that this storage should be permitted. The Committee accepted this outcome and agreed that guidance should be developed for how to conduct these types of operations. Further submissions on this topic were invited at future sessions.
- A draft unified interpretation (UI) of paragraph 4.10 of the BWMS Code was accepted by the Committee. This UI will be circulated as part of BWM.2/Circ.66/Rev.4, which will consolidate all existing UI's to the BWM Convention.
- A draft revised UI of BWM Convention regulation E-1.1.5 and the Form of the International Ballast Water Management Certificate, was also accepted by the Committee. This will additionally be circulated within BWM.2/Circ.66/Rev.4.
- Extensive amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book) were approved and will be adopted as of MEPC 80. Interested Member States and international organizations were invited to submit proposals on guidance for record keeping and reporting under the BWM Convention to future sessions.
- A framework for discussing ports with challenging water quality (PCWQ) issues was agreed upon by the working group and submitted to the Committee. This was accepted and entered into the final Committee report. Proposals on guidance for ships encountering challenging uptake water were invited to future sessions, taking into account these additional elements agreed by the Ballast Water Review Group (BWRG) at MEPC 79.

Due to time constraints, the proposals relating to electronic Ballast Water Record Books and consideration of documents MEPC 79/4/9 and MEPC 79/4/10 were referred by the Committee to the next session, along with any further submissions on this topic.

The BWRG will be re-established at MEPC 80.

For more details on these items, you can check out the BEMA Members-Only News Brief on MEPC 79. It is located through our website in the Members Only area.

Not a member? Contact our Membership Committee ([membership@bwema.org](mailto:membership@bwema.org)) to find out how you can get the latest news straight from BEMA.

#### ★ PPR 10

The Sub-Committee on Pollution Prevention and Response (PPR) will take place at IMO from Monday, 24 to Friday, 28 April 2023.

The Provisional Agenda (document PPR 10/1) is available on the [IMO DOCS](http://IMO.DOCS) website and is a document publicly available in advance of the session.

If you are a member of BEMA and want to submit documents, a paper, information, or your opinion on the topics of PPR 10, check out the BEMA IMO Delegate Protocol located in the Members Only part of our website. If you're not a member - then contact us to find out how you can join and contribute to the conversation!

## Events and Meetings

### IMO World Maritime Day

The President, Secretary General and Technical Committee Chair all represented BEMA at the World Maritime Day reception held at IMO Headquarters on September 29<sup>th</sup>. It was an honour to be invited to this event to celebrate World Maritime Day and promote the IMO's 2022 theme of "New technologies for greener shipping"!



### 2nd GloFouling Partnerships R&D Forum

Following hot on the heels of the World Maritime Day, President Efi Tsolaki and Technical Committee Chair Stelios Kyriacou, returned to London in October to participate in the 2nd GloFouling Partnerships R&D Forum and Exhibition on Biofouling Prevention and Management for Maritime Industries. The forum sought to help implement the IMO Guidelines for the control and management of ships' biofouling by providing a globally-consistent approach on how biofouling should be controlled and managed to minimise the transfer of invasive aquatic species through ships' hulls. The GloFouling project will also spur the development of best practices and standards for improved biofouling management in other ocean industries. For more information on this event, see the post from their website, which we have reprinted below.



## SMM Hamburg Meet and Greet

The #BallastGeeks sure are a good-looking bunch!



Thanks to the great turnout at SMM in early September, it was hard to walk more than a few meters in Hall A1 before running into a fellow #BallastGeek! After kicking off the event, we handed the microphone over to Secretary Mark Riggio to highlight the growth of BEMA and celebrate our recently granted consultative status as a non-governmental organization (NGO) recognized by the IMO.



It is thanks to the continued enthusiasm and participation of our member organizations that BEMA is able to present a unified voice to the public related to environmental treatment technologies protecting our global waterways.

Special thanks to our Charter Member sponsor [Ecochlor](#) for sponsoring the SMM 2022 Meet and Greet!!



### **SAVE THE DATE!**

It is never too early to start thinking about one of the biggest dates on the calendar: the BEMA Annual Meeting!! As we have done in the past, BEMA plans to coordinate our 6th Annual Meeting with an IMO meeting to try and help cut down on travel cost for Members. PPR10 is scheduled to be held in London from April 24-28, 2023. Make sure you plan to be in London early for the BEMA Annual Meeting which will be on Friday April 21, 2023! More details to follow...We look forward to seeing you there!

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### **Recent & Upcoming Industry Events 2023:**

**Riviera Webinar Ballast Week** - Online 31st January 2023

**CMA Shipping** - March 28 - 30, New London, Connecticut

**BEMA 6th Annual Meeting** - April 21, London

**PPR 10** - April 24 - 28, IMO Headquarters, London

**SEA ASIA** - April 25 - 27, Marina Bay Sands Hotel, Singapore

**INTERNATIONAL DAY FOR WOMEN IN MARITIME** - May 18, IMO Headquarters, London

**BIOFOULING MANAGEMENT & PREVENTION SEMINAR** - May 24 - 25, London

**NORSHIPPING** - June 6 - 9, Oslo, Norway

**INTERNATIONAL DAY OF THE SEAFARER** - June 25, IMO Headquarters, London

**MEPC 80** - July 3 - 7, IMO Headquarters, London

**WORLD MARITIME DAY** - September 28, IMO Headquarters, London

**KORMARINE** - October 24 - 27, Busan Exhibition and Convention Center, Busan, South Korea

**EUROPORT Rotterdam** - November 7 - 10, Ahoy Rotterdam Center, Rotterdam, Netherlands

**INTERNATIONAL WORKBOAT Show** - November 29 - December 1, David L. Lawrence Convention Center, New Orleans, LA.

**MARINTEC China** - December 5 - 8, Shanghai New International Expo Center, Shanghai, PRC

## Member Spotlight

*The Member Spotlight is an opportunity for Members to have exposure in the ballast water network. Take advantage of your Member benefits by connecting with your Association...If you have something to share with your fellow #BallastGeeks, make sure you email it to [Membership@BWEMA.org](mailto:Membership@BWEMA.org) for consideration to be included in the next Member Newsletter! Member Spotlight pieces are also typically included in BEMA's Real Ballast Fact Bulletin, which is BEMA's newsletter for external stakeholders.*

Starting and growing a business is never an easy task. The NakAI Robotics team knows this very well. When you have to develop and grow the entire industry at the same time, that is a task for a very select few. The ballast water industry knows these challenges all too well, and now, as the next set of regulations to prevent the spread of invasive species are taking shape, history is repeating itself in the biofouling market.

Doing the impossible is just another day at the office for the Israeli Special Forces. So when Special Forces friends Aviv Melman and Yair Tamir decided to take their mutual skill sets and start a company, they set their sights on the biofouling market "We started exploring this competitive market roughly 3 years ago" says Melman "focusing on industry demands and the developing regulatory framework. Leveraging our combined experience, in-house production, our contacts with the Israeli navy, and our proximity to the port of Haifa, we have already been able to test multiple generations of prototypes on real, operating ships. These trials prove our robot's seaworthiness as well as the potential fuel and money savings that proactive cleaning brings."

The energy, persistence, and tactical mastery that served them well in the military have helped the two entrepreneurs to deftly grow their company NakAI Robotics into one of the leading automated hull-cleaning robotics companies in the market.

"We have already assembled a team of eight highly skilled engineers," adds Melman. "With great industry collaborations and our recent capital campaigns, we are positioned to rapidly grow as this market evolves."

Funding for the development, research, and testing of the robot has been a full time job for Melman, while perfecting the engineering and programming of the autonomous robots has been the work of Tamir. Much like an Israeli version of Steve Jobs and Steve Wozniak, the pair are perfect complements of business savvy and technical capability.

The hard work of the duo has been reaping rewards as they have secured funding for the expansion of their manufacturing facility, have secured valuable access to ships in and around their home country of Israel, and have been successful in entering and winning a number of innovation contests.

Recently, Melman travelled to the U.S. after winning the Rhode Island Israeli Collaborative (RIIC) [BlueTech Startup Competition](#). The trip allowed him to make valuable contacts both in the shipping industry and in the tech community in the U.S. Following on the heels of this successful trip, the company was short-listed by the World Ocean Council and The Ocean Opportunity Lab (TOOL) for their first global Biofouling Innovation Challenge Pitchfest during Sustainable Ocean Week in Barcelona, Spain.

"It is so exciting to finally see growing awareness and newly introduced technologies in the shipping market," says Tamir. "Proactive hull cleaning is recognized as low-hanging-fruit for vessel owners to achieve immediate savings. Creating a way to bring value for vessel owners while protecting the environment is definitely a win-win proposition we are excited to be a part of.."

As the biofouling market begins to take shape, there is no doubt that the Nakai Robotics team will be at the front and center of innovation and excitement!

**Note that views expressed are those of the BEMA Member and do not necessarily reflect the opinions of BEMA. If you are a BEMA Member and want to see your company highlighted in our Member Spotlight, contact the Membership Committee at [membership@bwema.org](mailto:membership@bwema.org) to learn how!**



## 2nd GloFouling Partnerships Forum presents state of affairs on biofouling management (Reprinted from: <https://www.glofouling.imo.org/2nd-glofouling-partnerships-forum>)



IMO 2022, 2nd GloFouling Partnerships R&D Forum and Exhibition on Biofouling Prevention and Management for Maritime Industries Greener Technologies for Biofouling Management. For more photos of the event, visit the Flickr gallery [here](#)

The 2nd GloFouling Partnerships Forum and Exhibition on Biofouling Prevention and Management for Maritime Industries (11-14 October) was held at the International Maritime Organization (IMO) Headquarters, bringing together government delegates, researchers, leading scientific experts, technology developers, and global representatives from maritime industries such as shipping, ports and harbours, aquaculture & fishing, offshore oil & gas, deep sea mining and ocean renewables.

Participants discussed greener technologies for the management of biofouling and ways of tackling transportation of invasive aquatic species to protect marine biodiversity. Biofouling is the accumulation of aquatic organisms on wetted or immersed surfaces such as ships and other offshore structures.



IMO 2022, 2nd GloFouling Partnerships R&D Forum and Exhibition on Biofouling Prevention and Management for Maritime Industries Greener Technologies for Biofouling Management. For more photos of the event, visit the Flickr gallery [here](#)

Sessions were held over four days to debate and share knowledge about the most pressing areas facing the maritime biofouling sector, including:

- Preventing and reactive technologies for managing biofouling;
- Testing of technologies and innovative technology for monitoring biofouling;
- Environmental and economic impacts as well as best management practices in shipping and other sectors, such as renewable energy, aquaculture and recreational boating.
- Port perspectives and initiatives undertaken by ports
- Industry-led contributions to the global environment agenda,
- Policy aspects and how policy can timely and adequately respond to current biofouling management issues.
- Representation of women in the maritime biofouling field
- Recreational craft and invasive species report
- Biofouling management, fuel efficiency and GHG emissions
- Contributing to global efforts for biodiversity protection

### **GloFouling Exhibition**

Alongside the opportunity for discussion, Forum delegates were treated to an exhibition of the winning entries of a photography competition with pictures illustrating the problem of maritime biofouling. Several informative posters were also displayed, and through the wonders of virtual reality, there was also the chance to experience being up close to a submerged surface where the result of biofouling was all too obvious.

### **3rd GloFouling Partnerships Forum and Exhibition – Republic of Korea 2024**

The 3rd GloFouling Partnerships Forum and Exhibition will be hosted by the Korea Research Institute of Ships & Ocean engineering (KRISO), Republic of Korea, in late 2024.

Download the full report here: <https://www.glofouling.imo.org/publications-menu>

A [new IMO video](#) that highlights the importance of maintaining smooth and clean ships' hulls free from biofouling has been launched (13 December) at IMO Headquarters. The video explains how reducing and managing biofouling is key to improve fuel efficiency in ships and reduce GHG emissions.

Follow BEMA on social media to get the latest information, news and #RealBallastFacts directly from the #BallastGeeks themselves. Twitter: [@BEMAAssociation](#) LinkedIn: [Official BEMA LinkedIn Page](#)

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