

Ballastwater Equipment Manufacturers' Association Frequently Asked Questions (FAQ's)

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FAQ1 What is the objective of Ballastwater Equipment Manufacturers' Association (BEMA) in the shipping industry?

The purpose of BEMA is to provide manufacturers and industry stakeholders in the ballast water equipment market leadership and a unified, technical voice. As the Ballast Water Convention implementation phase has commenced in earnest and we are in the IMO Experience Building Phase (EBP), formation of the Association is a missing piece of the ballast water jigsaw puzzle to allow manufacturers to directly provide input to the EBP.

To accomplish this mission, the organization has set forth the following key objectives:

1. Represent and serve as a central, common voice for ballast water equipment manufacturers;
2. Provide the shipping industry with design and operational expertise to balance the directives and opinions of regulators, ship owner organizations, scientific testing networks, and environmental organizations that influence the requirements that directly impact the manufacturers as stakeholders in the ballast water treatment community;
3. Strive to participate at the IMO level and give technical support to all stakeholders as outlined in Article 13 of the BWM Convention by providing knowledge about the design, manufacture, installation, maintenance, and long-term functionality of ballast water treatment systems;
4. Provide and stimulate authoritative organized research, education and information exchange within the industry and with other industries, government bodies, and interested organizations;
5. Mobilize and finance volunteer, internal staff, and external professional expertise to provide the required range of service to members; and
6. To maintain a liaison to and cooperate with the governmental agencies and allied trade and professional associations throughout the world.

FAQ2 According to the basic principle of BEMA "the paramount need for this association arose from the growing demand for well founded information on the practicability of BWT technologies". Do you believe that BWTS technology is not mature enough to deal with the requirements of the IMO resolutions and USCG rules?

No, we at BEMA strongly believe that there are many mature technologies for the treatment of ballast water in accordance with the requirements of IMO and the USCG Rules. It is our mission to provide a coordinated voice for the manufacturers of these mature technologies and to balance the many voices in the marketplace that question the maturity of our members' treatment systems.

There have been many efforts in the past to coordinate the combined experience of test facilities, ship owners, Flag Administrations, and regulators, but to date there has been no effort put together and combine the experience and knowledge of the treatment manufacturers. BEMA is the result of that effort.

FAQ3 What do you wish to get out of BEMA? An exchange of ideas platform? Possible involvement at the IMO as an NGO?

BEMA primarily hopes to be a catalyst for the successful implementation of the BWM Convention and global ballast water regulations. Through the combined efforts of all interested members, we will provide impartial, technical, non-commercial data as needed to the industry to facilitate understanding of this complex issue. As the regulations and the implementation of global ballast water regulations continue to evolve, BEMA will be a voice for the continued development of standards, equipment, and testing methodologies to prevent the spread of aquatic invasive species through the transfer of ballast water.

As part of those efforts, BEMA will focus on achieving IMO Non-Governmental Organization consultative status as a key priority. Our expectation is that we will apply for this status in 2020.

FAQ4 Is BEMA only open to BWTS manufacturers or others possibly under a different membership category?

BEMA is open to all stakeholders in the ballast water treatment market. We have multiple membership levels designed to give every interested stakeholder a way to join.

FAQ5 How often do you intend to meet and what direction will you take - more of a technical nature? Educating shipowners and/or regulators?

BEMA has created a number of committees to allow us many different ways to contribute to the successful implementation of the BWM Convention and USCG regulations. BEMA has a Technical Committee to provide impartial, non-commercial information to the market. BEMA also has an External Affairs Committee to develop externally facing information designed for general education and updating stakeholders on the important matters in the BWTS market. BEMA also uses the Membership Committee to develop internal guidance and to share best practices among members to improve the overall implementation cycle.

Through the multiple committees and opportunities for members to get involved and receive value from the Association, BEMA is positioned to meet the industry's need for clarity and information on the complex implementation of the BWM Convention and global ballast water regulations.

FAQ6 Why was BEMA formed now? How did the need for this new Association emerge and what are your plans on the agenda with respect to BWMC?

The Ballastwater Equipment Manufacturers Association (BEMA) was formed shortly after MEPC 72 when the implementation schedule of the BWM Convention was delayed by an additional two years. This delay highlighted the need for the industry to be represented at the IMO and galvanized the manufacturers to action.

Concurrently, we heard from the shipping industry that an Association was needed to provide a unified voice, technical support, and to answer the many questions that were being raised by ship owning associations and Flag Administrations at MEPC. It was in this intersection of requests from ship owning associations and Administrations, along with a galvanized base of ballast water treatment system (BWTS) manufacturers that BEMA was born.

FAQ7 What are the biggest challenges towards BWM Convention implementation from now through 2024?

The biggest challenge facing implementation of the Convention is rebuilding the trust between manufacturers and the shipping industry and opening lines of candid communication. As systems have developed over the past decade, many significant improvements have been made in the performance, operability, and capabilities of treatment systems. Some owners with experience based on early-generation systems have a negative perception of their performance. This has created distrust and fear that the systems they will purchase will not work. This fear has contributed to delayed implementation and is forcing bottlenecks in the supply network that are not necessary. If there was sufficient trust between ship owners and BWTS manufacturers systems could be purchased and installed in a more deliberate, planned way.

A second, very significant challenge facing implementation of the Convention is the differing flag and port State control requirements put on BWTS installations. Both BWTS manufacturers and ship owners need consistency to facilitate taking the necessary actions to comply. BEMA has met with IACS directly to advance the conversation about harmonizing the interpretation of the IMO requirements and BEMA fully supports the IMO's Experience Building Phase (EBP) as a way to contribute information and encourage ship owners and Administrations to provide their data to the overall effort.

FAQ8 Do you notice any specific trend with the implementation of the BWM Convention so far that are contributing to issues with systems? What is your feedback and your advice to the industry to move forward?

BEMA has identified three primary problems inherent with implementing ballast water treatment systems onboard vessels:

1. Proper time is not invested into the planning and design of the BWTS installation;
2. System installation plans and designs are intended to ease installation of the system for the shipyard, not to ensure that the system is installed in accordance with the manufacturers' instructions to promote proper system function over its lifespan; and
3. Opportunities for integrating the BWTS with the ship's central automation system are often not thought about during planning.

Failing to address these three issues often leaves systems installed hastily and without thought to the overall operation and lifecycle costs of the installation and inevitably leaves the crews with significant extra work when using the systems.

BEMA's advice to industry is to coordinate closely with the manufacturer as early as possible in the process and to listen to their experiences and lessons learned. Many issues can be avoided if the manufacturer is seen as a partner to, and a resource for, the overall project team.

FAQ9 Where do you see the market is going in terms of vendors and competition in the short term? Should we expect more systems coming to market with IMO and/or USCG type approvals?

We expect to continue to see new Type Approvals both on the IMO and US Coast Guard side as additional technologies, solutions, and vendors come on line. The shipping industry is very diverse and there is a need for many different types of solutions to meet the many different vessel operating profiles. We would expect that as the market matures, there will be some measure of consolidation and contraction, but in the near term we expect that the market is right-sized for the number of active vendors currently serving it.

FAQ10 Is crew training an issue with respect to ballast water management? What do shipowners need to think about the crew and their understanding of these systems and their installation?

Crew training has been identified by many as a critical issue with respect to implementation of global ballast water management requirements and BWTS installations. As a trade Association, BEMA cannot comment on specific training requirements for specific systems, but we do recommend that ship owners carefully consider the training available, the complexity of the systems being offered, and the crews on their vessels when selecting a BWTS for installation on their ships.

FAQ11 What changes should we anticipate with the recent signature of the Vessel Incidental Discharge Act (VIDA) in the United States? What could be the challenges ahead?

The new Vessel Incidental Discharge Act (VIDA), signed into law in the United States in December 2018, is progress toward harmonization of the complex web of ballast regulations in the United States. While this is a universally good thing, there are a number of steps that need to happen before we know exactly how this will affect vessels doing business in the waters of the United States. BEMA is standing ready to offer assistance to the agencies writing these new regulations and harmonizing these requirements into a new set of standards.

As with any potential change, the challenges of VIDA lie in the new areas of uncertainty for ship owners. With a potential four-year timeframe between the signing of the law and the publishing of a new standard, though, this uncertainty will have little impact on the near term schedule for implementation of global ballast water regulations.

BEMA has contributed information to support the EPA with biological efficacy testing data and also offered [comments](#) on the on the proposed US Environmental Protection Agency (EPA) Vessel Incidental Discharge Act (VIDA) regulations

FAQ12 What does “new G8” / the ballast water code mean for me? Can I build repeat vessels (draw options) without touching the design of the ballast water system?

IMO Resolution MEPC.279(70), often referred as “new G8” and [IMO Resolution MEPC.300\(72\), the BWMS Code](#), require that BWMS systems installed on or after 28 October 2020 need to be IMO type approved according to these regulations adopted in 2016. IMO type approval certificates clearly state to which resolution they refer.

By checking the system's approval you can make sure that the system you chose for previous vessels is approved according to these rules.

FAQ13 What is the purpose of IMO BWMS Commissioning Testing (BWCT)?

As per BWM.2/Circ.70/Rev.1, commissioning testing is to validate the installation of a BWMS by demonstrating that its mechanical, physical, chemical and biological processes are working properly. Commissioning testing is not intended to validate the design of type-approved BWMS that are approved by the Administration ([BWM.2/Circ.70/Rev.1](#))

In an effort to support industry, BEMA has prepared the [“Ballast Water Commissioning Testing - Industry Guidance to Support Practical Implementation”](#)
