



ANNUAL REPORT 2025

One Sea Association

The One Sea Association is a non-profit global alliance of leading commercial companies involved in the value chain of automated and autonomous maritime transport systems. Membership is also open to entities that provide training on related technologies.

In 2025 the Association decided that full membership is available to universities, research institutions, and other organisations that generate theoretical or applied research knowledge relevant to the goals of One Sea.

The Association works towards establishing and implementing a necessary environment for an automated and autonomous maritime transport system. It plays an active role in developing the international legal framework and participates in standardisation efforts.

During 2025, One Sea followed the selected strategic priorities, focusing on international regulatory work, applying for membership to relevant organisations and increasing awareness of maritime automation.

Collaboration with International Networks to Drive Progress

One Sea continued to play a significant role in advancing discussions on new autonomous maritime technologies. Receiving provisional observer status from the International Maritime Organization (IMO) in 2024, valid for two years, after which IMO may change it to a permanent status, if the Association could demonstrate active participation and contribution to the work, One Sea continued to actively influence the debate on a non-mandatory code for Maritime Autonomous Surface Ships (MASS) by joining the correspondence group developing those rules.

The One Sea representatives participated in-person to working groups and through virtual means to other IMO meetings that considered related matters for the agenda items of interest. One Sea contributed to different submissions to the IMO meetings and submitted two papers to the organisation regarding onboard master and the experience building phase.

One Sea submitted two documents to the IMO 110th session of the Maritime Safety Committee. In the first paper One Sea argued that it was not necessary for a master to be onboard the ship, always if there are persons onboard, as that requirement would heighten the appeal of fully unmanned ships in the smaller ships category, reducing work opportunities. In the second submission One Sea emphasised that the Experience Building Phase of the MASS Code should be inclusive to ensure that practical experiences are received. There is a risk that the EBP may not meet expectations if sufficient and comprehensive input is not collected to support the finalisation of the code. The gathering of experiences should not be limited solely to technology suppliers but should also encourage contributions from end users.

One Sea participated, supported by a member expert, the 110th Session of the Maritime Safety Committee from the 18th to the 26th of June, and especially the Working Group on the MASS Code, and later in the autumn to the 4th Intersessional Working group on the MASS Code from 29th September to Friday the 3rd October contributing to the discussion on finalizing the draft non-mandatory MASS Code.

One Sea participated remotely to the 112th session of the Legal Committee observing the discussions on the level of a legal instrument addressing MASS. It was noted that although if a new Convention on MASS would be the preferred solution, it would severely delay the entry into force as it would require explicit ratification by member States.

One Sea also informed the members on relevant topics, without attending the meetings, from the

49th session of the Facilitation Committee (10 to 14 March 2025) the development of a comprehensive strategy on maritime digitalization and IMO Data sets especially the data set related to meteorological and oceanographic data. The agenda is of interest to software developers and system providers but will also have an impact on system integrators developing automated and autonomous concepts.

One Sea further informed the members on topics considered at the 12th session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) development for VDES, software maintenance, electronic publications and framework for data distribution and global IP-based connectivity for shore-based facilities and ships supporting ECDIS S-100.

The Association continued to engage in the starting up of the ISO TC8 subcommittee SC 26 on “Smart Shipping”. The scope of SC26 are standards that would support IMO MASS Code development while also including shipbuilding, supply chains, the utilization of cutting-edge technologies, data connectivity, to mention a.

The Secretary General joined, together with other One Sea members the ISO TC/8/SC26 1st plenary meeting 5th to 7th May 2025 in Oslo where work on e.g. preparing a Strategic Plan for the ISO Subcommittee was commenced. One strategic objective is to collect relevant information to formulating Information Papers for submission to IMO. The Director attended the second plenary meeting 11th to 14th November 2025 in Kobe, Japan further supporting the development of the work plan for this subcommittee and expressed his recognition of the significance of international standards for the practice of autonomous ships and hoped to have more detailed exchanges with all the experts at ISO community.

The Association also applied for liaison membership with the International Electrotechnical Commission (IEC) Technical Committee 80: Maritime navigation and radiocommunication equipment and systems. The scope of IEC/TC80 is to prepare standards for maritime navigation and radiocommunication equipment and systems making use of electrotechnical, electronic, electroacoustic, electro-optical and data processing techniques. The One Sea representative joined the meeting held in Nagasaki, Japan from 21st to 22nd of October establishing preliminary contact for further collaboration. Matter related to GNSS, VDES, ECDIS, BNWAS, DSC, Track Control systems and related data interfaces were on the agenda.

Collaboration with the International Hydrographic Organization (IHO) continued. The IHO MASS Navigation Project Team met in Korea but could not be attended due to multiple meetings on that date. The primary role of the IHO MASS PT is ensuring that that the developing S-100 suite of standards, supports the requirements for autonomy.

One Sea continued its collaboration with the Swedish Lighthouse “Smarta Fartyg” (Smart Ship) network and participated remotely and in person in the group's meetings. One Sea attended the meeting in Gothenburg further underlining the importance of experts meeting in person at least once a year to discuss matters on advancing technologies within the maritime domain.

One Sea also participated remotely in the meetings of the MASS Think tank arranged by the Royal Belgian Shipowners' Association that had five meetings in 2025 and shared relevant information and presentations to its members.

The regulatory working group held one virtual meeting to discuss the MASS Code specifics. A total number of nineteen specific regulatory proposals were coordinated for views and input to the discussion at different international fora.

Memberships Provided to be Challenging Year

The year 2025 was again challenging for membership acquisition. The One Sea secretariat held several online meetings with potential members and met up with company representatives at various events. Despite evident interest from companies, there was a sense of general uncertainty and muted sentiment, which resulted in a lower-than-expected number of new members joining.

Two members were expelled due to non-payment of membership fee. The introduction of approving academia and research members to join brought three new members, Aalto University, Danmarks Tekniska Universitet and Turku University of Applied Science.

Regrettably three founding members and one industry member decided to resign by the end of the year.

Targeted Global Engagement: Increasing Awareness and Building Networks

In 2025, the One Sea Secretariat was invited to participate and speak at numerous events. Participation was carefully considered, selecting events considered suitable for effectively conveying the Association's core messages to the participants. Alongside advocacy opportunities, the participation decision was based on the possibility of approaching companies interested in joining the Association.

The speaking opportunities were aimed to highlight themes that would improve stakeholders' awareness and understanding of the advantages of emerging maritime autonomous technologies while also fostering social acceptance and trust in these innovative solutions.

In 2025 One Sea held one event at the International Maritime Organisation, addressing flag States, administrations and other organisations and their representatives. The session named "MASS Now and Next Steps" introduced an industry representative panel consisting of ABB, Kongsberg, MAHI, and Marautec. The presenters addressed topics of Remote Operations Center (ROC), Cybersecurity in the context of autonomous ships and Minimum Safe Lookout Area & AI Technologies for MASS followed by a Q/A session.

During the past year, One Sea took the stage at the following international events.

One Sea participated in the Annual Autonomous Ships Conference in Amsterdam, as speaker-panellist. The Conference addressed a wide range of important topics. The program addressed Rule Development for MASS, Data and Communication, Developments in Remote Operations, Navigational Support, Cybersecurity, Project Reviews and Case Studies, Legal Considerations regarding AI and Trajectory Planning.

In addition, One Sea participated as a speaker to the 2025 International Autonomous Ship Conference (Shanghai). One Sea addressed the time schedule for the entry into force of a mandatory regulation for MASS, business visions, Minimum Safe Manning of MASS, barriers for the deployment, common terminology and work undertaken in other organisations. The One Sea representative also visited the Shanghai Marintech China 2025 fair at the Shanghai New International Expo Centre to learn about new advancements in maritime technology.

Besides participating in international conferences with large audiences, the Association also participated as a panellist at SMN event in Rotterdam exploring the evolving landscape of autonomous cargo ships under IMO regulations (MASS vessels) and their transition from experimental phases to commercial projects. The panel elaborated on how autonomy reduces collisions at sea, increases fuel efficiency, addresses crew shortages, and enables mission-critical tasks. The session highlighted real-world examples and discussed the high levels of technological maturity achieved in autonomous systems.

Social Media and Webinars: Building an Online Presence

One Sea has selected LinkedIn as its primary social media platform for communication. The aim was to further increase the number of followers that was around 1,400 at the end of the year 2024. At the end of the year 2025 the followers had increased to almost 1800 with over 1 700 page views and almost a thousand unique visitors. In the last quarter of the year, the active use was further increased by the secretariat by increasing reactions, posts, and comments.

During 2025, the "OneSeaTALKS" webinars continued and expanded to invite also outside participation from external organisations and administration. Four online sessions featuring diverse topics and informative presentations engaging speakers from both internal and external organisations.

- Remote pilotage - the way from development to reality (Finnpilot)
- Presentation of MAHI approach (MAHI)
- Smart Shipping Program (De Vlaamse Waterweg NV)
- Minimum Safe Lookout Area for MASS (Marautec).

All sessions were recorded and made available in the designated folder within the One Sea members' Teams Group. The program was however interrupted after the summer in lack of topics, time, and resources.

New Board Took Leadership: Updated Action Plan

The Board of Directors met five times during 2025, once in a hybrid composition and four times in online only. In addition, two Board workshops were held. The Board considered, in addition to the statutory obligations, amendments to the Statutes and bylaws of the Association, further clarifying processes and increasing efficiency of the Association. The Board held two workshops through virtual means to consider practical measures to influence and advance the purpose and objectives of the Association.

The members of the Association met two times for the Annual General Meeting to perform the statutory obligations, adopt changes proposed by the Board to the Statutes and elect the new Board of Directors for the period 2026-2027,

Due to a change in the statutes, the previous Board of Directors' term ended by the end of the year. The change was initiated to align the term of the Board with the financial year. All members were invited to express their interest and nominate a representative to the new Board for the next two-year term. The following Board members were elected by the Annual General Meeting in December 2025.

- Aalto, Mr. Osiris Valdez Banda
- GROKE, Mr. Juha Rokka
- Marautec, Mr. Ben Zhang
- ABB, Mr Roy Funck
- Kongsberg, Mr. Markus Laurinen
- MTI, Capt. Jun Nakamura

- ORCA AI, Mr. Dor Raviv

At the same meeting, Mr Markus Laurinen was re-elected Chair of the Board. The Board later elected Mr Ben Zhang as a Vice Chair.

After its election, the Board initiated an update of the Association's vision and mission and began drafting a strategic action plan for 2026–2027. The secretariat held discussions with all members to support the board's work and to gather insights on their expectations and goals. The updated Action Plan was reviewed by the Board and approved at the year's second Annual General Meeting of members in December 2025.

Financial and Administrative Matters Furter Reduction of Resources

The Association's activities continued being fully funded by membership fees.

The Association continued improving its administrative functions by introducing a new yearly administrative clock for decisions to be made, allowing better evaluation for the members and decision making. In addition to the alignment of the term of the Board and the financial year, further clarifications were made defining the time of validity of membership, handling of paid fees and terms of resignation. The statutes and bylaws were also clarified to allow a new category of research members to join and to have a dedicated membership fee. The seats at the board were expanded, but due to objections by the Finnish Patent and Registration Office (PRH), an agreeable solution to ensure balancing the composition of the Board between industry and research organisations could not be developed. Due to procedural aspects, the approved amendments were adopted, and it was agreed to revert to the composition of the Board in a new process in 2026.

The year was marked by the resignation of the Secretary General in the middle of the year, due to having received a new work opportunity at a commercial company. The last day of work for the Secretary General was the 31st of August. In the last third, the Association staff was reduced to one. This invoked a further reduction in the resources and work time of the Associations. It was agreed that the Director of Regulatory Affairs continued, under an amended service contract, providing additional hours to prepare the budget, action plan, and other statutory functions of the Association for 2026 and performing other duties belonging to a Secretary General.

Savings in staff salaries for 4 months, was decided to be used for increasing the Associations international profile and to further securing financial stability for the next financial year. The working hours for the Director was increased to be maximum full time, without overtime, according to needed efforts. No full time was invoiced, and the efforts remained well below full time. The total workhours were reduced by 25% in comparison to two staff members.

Considering the reduction in staff and the resignation of members, the Board decided to device a budget that was based on the remaining resources. This decision also provided an opportunity to reduce the membership fee for remaining members and to make the fee more appealing to possible new members.