**Notes from the ARM Committee to the MASS TG meeting 8 December 2021**

During the last session in the ARM Committee in October 2021, we had an initial MASS meeting attended by 7-8 participants and chaired by Guttorm Tomren from Norway. We discussed the challenges and way forward for the ARM Committee in relation to MASS. Currently we expect that the work will end up with a recommendation or guideline covering ARM work items related to MASS. We agreed to do some intersessional work on the way forward, before the next committee meeting in March 2022.

In general, IALA’s main purpose is to provide recommendations and guidance to the coastal states and the maritime administrations on their products, services and obligations. The development of MASS will bring changes to shipping, port operations and the safety of navigation, and it is important to assess and discuss its impact on IALA related services at an early stage of its development.

Having said MASS, it is very important to bear in mind that MASS are not by definition the same as unmanned ships. It is ships where a number of functions are fully or partially automated in order to improve safety, reliability, and efficiency of operations, and we must take that fact into consideration in our work with IALA publications.

If we on strategic level e.g. looking at the SOLAS V, Reg. 13 obligations, with AtoN provision based on volume of traffic and degree of risk. How will the development of MASS, digital technologies and systems effect on that. Will the volume of traffic change? That is difficult to predict and many other elements can have influence on that. But when it comes to the degree of risk, we believe that new digital technologies will effect the degree of risk, and the maritime administrations must be ready to consider their products and services. The development of appropriate IALA Standards, Guidelines and Recommendations are essential in that respect, as well as the work with common terminology and standards for communication, ship reporting and data exchange, between MASS and e.g. VTS centers and other stakeholders.

If we are looking at the Aids to Navigation requirements and management, the focus areas for the ARM Committee in regards to MASS are considered to be:

* The Maritime Buoyage System MBS, the No. 1 IALA publication. The MBS must apply to AtoN provision for all vessels (SOLAS and non SOLAS including MASS). So that will be an ongoing task in the committee to follow the development of MASS in order to ensure, that the MBS is covering the AtoN provisions for these developments.
* All reviews of ARM managed documents will include consideration on MASS and inclusion of appropriate statements where applicable with the understanding that MASS is starting to become part of the maritime traffic mix along with traditional vessels.
* ARM will develop a policy statement on AtoN requirement and management with regard to MASS, e.g. with the above volume of traffic and degree of risk issue as an example.
* Specific guidance for AtoN authorities on MASS will be developed where gaps in existing recommendations and guidelines are identified. Where feasible these will be cross committee to avoid proliferation of MASS specific documents.
* These focus areas, as well as probably other MASS related activities, are expected to be included in the ARM task plan for 2023 to 2027.

The above approaches are reflected in the input paper from ARM to PAP and this TG (*MTF02-3.1.1 ARM14-11.1.2 Liaison note to to PAP and MASS Task force - ARM approach to MASS)*