

IALA and IMO work on MASS

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IMO definition of degree of autonomy:

1. Ship with automated processes and decision support
2. Remotely controlled ship with seafarers on board:
3. Remotely controlled ship without seafarers on board.
4. Fully autonomous ship:

IMO establishment of a MASS working group within THE MARITIME SAFETY COMMITTEE (MSC)

- Consider the progress made with the regulatory scoping exercise
- Finalize draft interim guidelines for MASS trials
- Prepare terms of reference

IMO INTERIM GUIDELINES FOR MASS TRIALS

- Safe, efficient and transparent trials of MASS to assist authorities, industry etc involved.
- Address risks to safety, security and protection of the environment.
- Compliance with mandatory instruments should be ensured.
- Manning and qualifications of personnel involved in MASS trials
- Human element should be appropriately addressed.
Machine interface as harmonization between human centred design and automation
- Infrastructure for safe conduct of trials
- Reporting requirements and information sharing
- Cyber risk management
- Format of Report (Summary of results)

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IALA works for AtoN and VTS authorities

- Development of interim IALA Guidelines on the use of AIS message for MASS trial

AIS message coding for MASS trial:

1. Through the special manoeuvre indicator bits in the position messages.
 2. Through the ship type code in the static information message.
 3. Through navigational status in position messages (1-3).
 4. Using spare bits in any of the two messages.
 5. Using safety related broadcast message (14)
- Develop guidance on the provision of AtoN for autonomous vehicle/vessel operations
 - Implications of MASS from a VTS Perspective
 - ENAV draft Guideline on MASS has started.
 - Investigations on expectation on MASS emerging technologies and IALA/IMO regulations from coastal states

Expectation on MASS emerging technologies from costal states/organisations

- An investigation has already started at World Maritime University in Sweden. This study focuses on the national preparedness of different countries, including Norway, Singapore, South Africa and the Philippines in terms of maritime policy/legislative frameworks, societal readiness and HR development for autonomous vessel operations.