

Current status of system and policy related to MASS in the Republic of Korea

- The MASS Act

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Introduction

In IMO

- Developing the non-mandatory goalbased instrument (MASS Code)
- Making the principles and function along with definitions of key terms

The review of existing IMO instruments (SOLAS, STCW etc.) and adoption of the new mandatory code for MASS ('25-'28)

In the industry of MASS

- Advancing the development of core technologies
- Preparations for the commercialization MASS.

It is a crucial time to prepare the regulatory framework to ensure the safe and secure operations of MASS.

Commence the development of

Continue the development of code

Application of the Code References to SOLAS MASS and MASS functions Commence the review of existing IMO instruments

Adoption of the new non-mandatory

MASS Code

Approval of the mandatory MASS Code

Finalization draft SOLAS chapter Further development of consequential amendments to existing instruments Adoption of the new mandatory MASS Code

1 July 2026 at the latest (first half of 2026)

2028

New mandatory MASS Code

Entry-into-force date of 1 January 2028

Introduction

"Act on the Promotion of the Development and Commercialization of Maritime Autonomous Surface Ships" (the MASS Act)

The Republic of Korea has developed the MASS Act

- To establish a foundation for safe operations
- To promote the development and commercialization of related technologies and core equipment.

To assist the discussion in IMO Committee and JWG, the Republic of Korea provides information on the MASS act for the promotion of technology development and commercialization of Maritime Autonomous Surface Ships in MASS-JWG 3 (MASS/JWG 3/INF.2).

General

In January 2024, the Republic of Korea enacted the Act to establish a foundation for the safe operations of MASS and to promote the development and commercialization of related technologies and core equipment, including the establishment of a maritime logistics systems.

This Act consists of four chapters and includes policies and standard to promote the development of technologies and key equipment for MASS and to create the foundation for the vitalization of related industries.

It applies to "Maritime Autonomous Surface Ships (MASS)", which are defined as ships capable of operating autonomously with minimal or no human intervention, such as crew or remote operators.

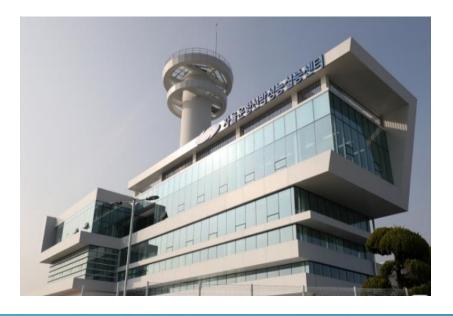
The foundations for the development and commercialization of MASS

Master and implementation plans

- To promote the development and commercialization of MASS (Regularly plans)
- Another implementation plan for the dissemination and proliferation of MASS, including the establishment of maritime logistics systems.

Supporting the performance demonstration of technologies

- For technologies and core equipment of MASS
- Using the Autonomous Ship Verification and Evaluation Research Center to facilitate the development of MASS technology and associated equipment.





The foundations for the development and commercialization of MASS

3 Establish maritime logistics sys., Intelligent and automated service

To ensure its safe operation, promote and disseminate MASS the Korean government will establish maritime logistics system.

- Intelligent and automated services for securing connectivity with MASS
 - Maritime traffic information services
 - Intelligent information services for aids to navigation
 - Integrated port logistics information systems

The foundations for the development and commercialization of MASS

4 Human resources, R&D, International cooperation

The Korean government will

- Foster the development of professional human resources for the MASS industry
- Expand the R&D projects, international cooperation projects, and support for related industries.



The foundations for the development and commercialization of MASS

5 Safety Assessment

To ensure the maturity of technology and safe operations of MASS

- The stability of autonomous navigation systems
- The compatibility and security for data exchange among MASS, other ships and shore
- The compatibility with existing communication systems.

6 Exemptions from certain existing regulations

Exemptions from certain existing regulations are provided for the trials or demonstrations of MASS and associated equipment. They are required to:

- Take sufficient measures to ensure the safety of MASS
- Stop voyage or take the necessary corrective action if MASS causes damage to other vessels or to person or poses a danger to maritime traffic.

Conclusion

National Regulation for MASS in the Republic of Korea

"Act on the Promotion of the Development and Commercialization of Maritime Autonomous Surface Ships"

IMO regulatory development for MASS

To create a foundation for the safe operations.

To promote the development of core

✓ technologies and support related industries.



Mandatory implementation of the MASS Code in 2028 Subordinate laws and detailed guidelines are currently being developed and expected to be fully implemented January 2025.

Conclusion

National Regulation for MASS in the Republic of Korea _ In particular,

the Korean government aimed to establish a law framework for the safe operations of MASS, considering the MASS Code being developed in the Maritime Safety Committee(MSC).

IMO regulatory development for MASS The Korean government will continue to refine it in light of the approval process and requirements under the MASS Code.

Mandatory implementation of the MASS Code in 2028





Conclusion

National Regulation for MASS in the Republic of Korea

IMO regulatory development for MASS

Mandatory implementation of the MASS Code in 2028

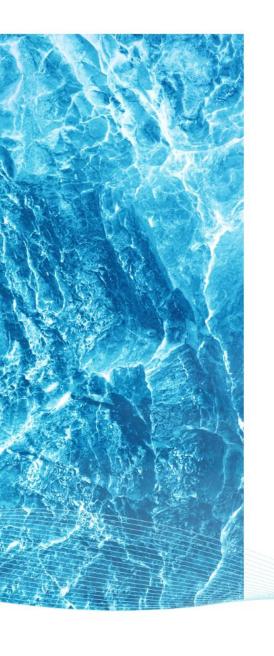
- It is essential to establish an institutional
- foundation for practical operations as MASS encompasses all industries, not just maritime, shipping and shipbuilding.

The support and cooperation of related industries will be crucial.



The Republic of Korea will continue to strengthen its legal framework to ensure the safe operations of MASS and expand support for the industry.

For enhancing the overall national regulations in view of the mandatory implementation of the MASS Code in 2028.



THANK YOU