IMO to develop global strategy for maritime digitalization

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The International Maritime Organization (IMO) is taking action to create a comprehensive strategy that harnesses emerging technologies to turbo-charge efficiency, safety and sustainability in the shipping industry.

A roadmap for digital transformation

During its 49th session in London from 10 to 14 March, IMO's Facilitation Committee (FAL) outlined a work plan for developing the IMO Strategy on Maritime Digitalization, which is set to be adopted by the Organization's highest governing body – the IMO Assembly – by the end of 2027.

The cross-cutting strategy will span different areas of IMO's work, fostering a fully interconnected, harmonized and automated global maritime sector.

To guide this process, the Facilitation Committee established a Correspondence Group to define the strategy's scope, key objectives and implementation framework. The Group will work over the coming year to identify existing and emerging technologies, standards and methodologies that can support maritime digitalization, while ensuring alignment across IMO's various committees.

The Facilitation Committee invited the Marine Environment Protection Committee (MEPC) and Maritime Safety Committee (MSC) to encourage Member States and international organizations to join the Correspondence Group, to ensure the early involvement of all stakeholders in shaping the IMO digitalization strategy.

The Correspondence Group will table a report to the next session of the Facilitation Committee (FAL 50) in 2026, before a final submission is made to the Assembly session scheduled for the end of 2027.

IMO Secretary-General Arsenio Dominguez emphasized the transformative potential of cutting-edge technologies such as AI and autonomous navigation, while recognizing related challenges, including cybersecurity risks and the global digital divide.

He stated: "The IMO Maritime Digitalization Strategy is a game-changing effort to make smooth, seamless, smart shipping a reality. It will help integrate vessels and ports, improve logistics and optimize routes, while reducing greenhouse gas emissions. We must work together to ensure the strategy serves all."

Advancing digitalization initiatives

The strategy builds on previous milestones, including the introduction of mandatory Maritime Single Window (MSW) regulations last year, which require ships and ports to use a single digital platform to exchange information and streamline port call procedures.

The 49th session of the Facilitation Committee advanced other key digital initiatives, including:

- Updated IMO Compendium on Facilitation and Electronic Business: A new version was approved, featuring additional data sets to improve standardization and interoperability across maritime IT systems.
- Enhanced Maritime Single Window (MSW) Guidelines: Amendments to the Guidelines for setting up a maritime single window were approved to introduce verification functions, reducing manual administrative burdens and eliminating redundant checks by different authorities.
- Cybersecurity for Maritime Single Window: A new output was introduced to develop cybersecurity measures to safeguard MSWs and protect digital maritime operations from attacks.
- **Electronic certificates Guidelines**: Joint FAL-LEG-MEPC-MSC Guidelines on electronic certificates were approved and forwarded for concurrent approval by IMO's Marine Environment Protection, Maritime Safety, and Legal Committees.

Input from Member States

The success of the IMO digitalization strategy will depend on input from Member States and international organizations, particularly concerning safety and environmental protection considerations. A detailed summary of the Facilitation Committee meeting will follow.