



LOSS PREVENTION UPDATE

DIGITAL BUNKERING SERVICES AND THE ISSUANCE OF ELECTRONIC BUNKER DELIVERY NOTES (eBDNs) WILL BECOME THE DEFAULT STANDARD IN SINGAPORE STARTING FROM 1 APRIL 2025

In a **recent announcement** by Maritime and Port Authority of Singapore (MPA) made in October 2024, with effect from 1 April 2025, bunker suppliers will be required to provide digital bunkering services and issue electronic bunker delivery notes (eBDNs) as the default standard¹. This move represents a significant step forward in modernising bunkering operations in Singapore.

UNDERSTANDING THE REGULATORY FRAMEWORK

Licensed bunker suppliers in Singapore are required to have digital solutions in place and to use eBDNs as the default standard for documentation. While physical BDNs are still permitted in exceptional circumstances, the push toward digitalisation is clear.

To ensure continuing compliance as the regulatory and technological landscape evolves, stakeholders are encouraged to maintain open communication with bunker suppliers, flag administrations/classification societies, and, most importantly, the MPA.

As the final authority on the interpretation and application of local port requirements, the MPA's guidance should be sought promptly if there is any uncertainty regarding these or other regulatory matters within Singapore waters.

CLARIFYING THE SHIP'S ROLE IN THE DIGITAL PROCESS

Operationally, the receiving ships have minimal involvement in the digital implementation process except for the potential need to update their onboard procedures and Safety Management System (SMS) to incorporate these changes.

¹ Advancing Maritime Digitalisation, Decarbonisation and Manpower Development Efforts at SIBCON 2024: <https://www.mpa.gov.sg/media-centre/details/advancing-maritime-digitalisation--decarbonisation-and-manpower-development-efforts-at-sib-con-2024>



The bunker suppliers are responsible for issuing eBDNs in compliance with SS648 standards (the local bunkering standard) and typically inform receiving ships in advance of their intention to use the digital process. To facilitate this, supplier representatives typically bring device(s), such as tablet(s), to assist with the digital documentation process.

DIGITAL DOCUMENTATION PROCEDURES

The eBDN issuance process follows the conventional bunkering procedures but replaces physical documentation with digital formats. Key information (e.g. bunker requisition forms, pre-delivery checklists, and mass flow meter readings) is entered and agreed upon digitally during the opening and closing phases of the bunkering operation. It is recommended that the ship confirm its receiving email details with suppliers to ensure the timely receipt of final documents.

VARIATION IN SOLUTION PROVIDERS

Currently, **five** (MPA-whitelisted) companies offer digital solutions for eBDNs². These providers may employ varying user-interface formats and/or verification methods. For instance, a provider requires a current photo (similar to a selfie) of the chief engineer, bunker clerk (BC), and surveyor (if present) during the documentation phases as an added layer of protection against signature forgery. While these measures enhance security, they may also raise concerns or invite scrutiny if ships recall a different process used during another bunkering operation powered by a different solutions provider.

Members should be aware of such variations to avoid potential misunderstandings.

HANDLING LETTERS OF PROTEST (LOPs)

A critical step during closing documentation is verifying that any LOPs raised are properly recorded within the eBDN system. Typically, the final page should indicate whether an applicable LOP has been raised for the bunker stem **before the digital signing and eBDN issuance takes place**. If discrepancies are identified, they should be addressed with the supplier and surveyor immediately.

While physical LOPs remain an option, this approach may bypass the benefits of the digital system's automated reporting process.

ENSURING ACCURACY BEFORE FINALISING eBDNs

As with conventional paper documentation, all details (e.g. seal numbers) **should be thoroughly reviewed and confirmed before finalising the eBDN**. Once signed and disembarked, future amendments will be expected to require agreement from all parties, which can be increasingly challenging as the requested changes will then most likely need to be approved without the physical presence of their representatives for satisfactory verification.

Take the time to verify all information to prevent complications.

2 Digital Bunkering: <https://www.mpa.gov.sg/port-marine-ops/marine-services/bunkering/digital-bunkering>



CLOSING DOCUMENTATION AND DISTRIBUTION

Upon completion, eBDNs and related bunkering documents are emailed to relevant parties.

In a recent [FAQ](#) by the MPA, it is clarified that suppliers who have adopted digital bunkering solution will not be required to issue physical BDNs. However, if the situation necessitates, the supplier can use the eBDN as the original record to generate a paper BDN³.

DOCUMENTING SYSTEM FAILURES AND CONTINGENCY MEASURES

While no further action is required from the receiving ship when the bunkering documentation process reverts to traditional, paper-based methods³, it is recommended that ships document instances where a particular bunkering operation in Singapore waters was conducted manually.

Maintaining a record of such instances aligns with good record-keeping practices, helps ensure transparency, supports verification during audits and provides a clear account if questions arise later. This documentation should, ideally, also include the reason provided by the bunker supplier/craft operator for not completing the process electronically (e.g., system failure or other technical challenges).

COMPLIANCE AND SECURITY IN THE DIGITAL PROCESS

It is important to note that, despite the shift to a digital process, the retention of the eBDN for three years remains a mandatory requirement in accordance with Regulation 18.6 of MARPOL Annex VI. Additionally, as outlined in IMO's [MEPC.1/Circ.795/Rev.8](#), an electronic BDN should be protected from edits, modifications, or revisions and should be made available on board as required by the regulation, whether in hard copy or electronic format. Authentication should also be possible through a reliable verification method⁴.

As such, shipowners are encouraged to ensure their operational and IT infrastructure can support and securely handle digital documentation. This may include implementing cybersecurity measures to verify the authenticity of communications, prevent phishing attempts, and maintain reliable backup systems for storing digital records.

3 Port Marine Circular on Digital Bunkering FAQs: [https://www.mpa.gov.sg/docs/mpalibraries/mpa-documents-files/oms/bunkering/pmc-on-digital-bunkering_faq-\(updated-sep2024\).pdf?sfvrsn=e862e108_1](https://www.mpa.gov.sg/docs/mpalibraries/mpa-documents-files/oms/bunkering/pmc-on-digital-bunkering_faq-(updated-sep2024).pdf?sfvrsn=e862e108_1)

4 Unified Interpretations to MARPOL ANNEX VI: [https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Circulars/MEPC.1-Circ.795-Rev.8%20-%20Unified%20Interpretations%20To%20Marpol%20Annex%20Vi%20\(Secretariat\).pdf](https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Circulars/MEPC.1-Circ.795-Rev.8%20-%20Unified%20Interpretations%20To%20Marpol%20Annex%20Vi%20(Secretariat).pdf)

FURTHER INFORMATION

For further information and interpretation of the upcoming requirement, please visit [MPA's website](#), contact them directly, or email us at lossprevention@tindallriley.com.

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