

Port Marine Circular on Digital Bunkering FAQs

Implementation/ Operations

1. What is the implementation timeline for Digital Bunkering?

From 1 April 2025, bunker suppliers will be required to provide digital bunkering services and issue electronic bunker delivery notes (e-BDNs) as a default.

2. For suppliers that adopt Digital Bunkering, do they still require to manually update bunker sales volume? If yes, when will MPA stop manual reporting?

MPA will work closely with the supplier on the transition to Digital Bunkering to automate the reporting of bunker sales information. Manual reporting via digitalPORT@SG™ portal will be required for instances where a supply could not be reported via Digital Bunkering. Suppliers are strongly encouraged to adopt digital bunkering early to familiarise the crew/customers well before mandatory implementation and enjoy its benefits.

3. Will the suppliers be required to submit data for loading and ship-to-ship in addition to delivery operation?

There is no need to submit such data at this moment. MPA will work with the bunkering stakeholders to work on the timeline for the submission of loading and Ship-to-Ship data in due course. Nevertheless, the whitelisted digital platforms will have provisions to cater for these data and the suppliers can also utilise the platform to further digitalise their inhouse system.

4. Who is supposed to procure, install, subscribe, and maintain the digital solutions?

It will be the bunker supplier's responsibility to ensure eBDN issuance, including all necessary SS648 bunkering documentation. Monthly bunker sales volume information is also required to be submitted to MPA by the suppliers. MPA will not be a party to any commercial discussions between the suppliers, craft operator, digital solution providers or any other stakeholders.

5. Which digital bunkering solutions can be implemented in Singapore?

Only the MPA-whitelisted digital bunkering solutions can be implemented in Singapore. The list of whitelisted solutions is available at <http://www.go.gov.sg/digital-bunkering> which will be updated as solutions get whitelisted or delisted.

6. Can hard copy BDN be issued to vessel?

Bunker suppliers are to provide eBDNs as a default from 1st April onwards. However, if customer insists on paper BDN or where situation necessitate, supplier could use the eBDN as the original record to generate the paper BDN. Bunker suppliers that implemented digital bunkering solutions should encourage and inform their customers on the use of eBDN.

7. Is it required for our Cargo Officer to go onboard the receiving vessel to do the necessary paperwork?

For suppliers that have implemented digital bunkering solution, cargo officers are generally not required to go onboard the receiving vessel for bunkering paperwork, as the unique link and/or password will be sent to the receiving vessel for the Chief Engineer/Master to complete the bunkering documentation electronically.

8. What is the process of approval for installing digital bunkering solution onboard a bunker tanker?

The digital bunkering solutions are mobile and web-based applications and can be accessed using internet-enabled devices that are secured and patched, i.e., laptop, computer, tablets, handphones, etc. However, barge operators must ensure that installation of any internet devices onboard as necessary must be in accordance with applicable flag/class rules. MPA must be updated on the suppliers and the barges that have been upgraded for digital bunkering and the service provider. No modification of the MFM or the MFM system is normally required for the installation of digital bunkering solution. However, in the event it is required, it must be done only with MPA's approval.

9. What should the supplier/craft operator do in the event where the customer, Master/Owner refuse to accept the eBDN or participate in Digital Bunkering?

The supplier/craft operator shall engage and inform the customer and Master/Owner in advance regarding the conduct of digital bunkering and the issuance of electronic documents. The Port Marine Notice on digital bunkering could be presented to the customer and Master/Owner to inform them on Singapore's implementation of digital bunkering.

10. Would MPA's approval be required for the change of digital solution provider?

MPA's approval is not required for the change of whitelisted digital solution providers. However, MPA should be informed.

11. What are the procedures required for the update/upgrade of the digital system?

Solution providers must inform MPA prior to the update/upgrade of their digital system. The list of system changes shall be provided to MPA for approval.

12. How will the B2G reporting be transmitted to MPA and how will we know that it has been successfully transmitted?

The B2G reporting, along with the status of transmission, will be available via the digital bunkering solution.

13. How will the vessel and surveyor receive a copy of the eBDN?

The eBDN, together with the related bunkering documentations, can be transmitted to the vessel and surveyor via email and/or downloaded directly from eBDN solution.

14. How long must the supplier and receiving ship retain the eBDN?

In accordance with regulation 18 of Marpol Annex VI, the eBDN must minimally be retained for a period of three years after the fuel oil has been delivered on board. Suppliers must also retain the eBDN for at least three years from the date of the delivery. This should form part of the quality management system for the bunker supply chain (QMBS) requirement under SS 524.

15. What are the measures in place to ensure information security?

The digital service provider whitelisted by MPA must have ISO 27001 certification (or equivalent) and conduct cybersecurity assurance testing such as vulnerability assessment and penetration testing (VAPT), that would identify and address cyber security weaknesses within its system. In addition, the digital bunkering solutions offered by the provider must comply with all applicable laws (i.e., the Electronic Transactions Act (Chapter 88)), regulations, standards, and guidelines in Singapore.

Bunker suppliers/ craft operators should also conduct security risk assessment and due diligence on the selected solution(s) and vendor(s) based on its own operating environment, requirements and specific implementation which vary from company to company.

Standards Development

16. Will digital bunkering be incorporated into Singapore standards for bunkering?

The revision of the existing SS648:2024 Code of Practice of Bunker Mass Flow Metering is being developed by the industry-led Singapore Standards Council to support electronic bunkering documentation was published in October 2024. A new SS709:2024 Specification for Digital Bunkering Supply Chain documentation was published in November 2024 to enable standards and interoperability across different systems.

Support for Companies

17. What support is available for the implementation of digital bunkering? How do we apply for such support?

MPA is committed to supporting companies in driving workforce transformation because of implementing digital bunkering.

Digital bunkering offers you an opportunity to reskill your current workforce who are Singaporeans or Permanent Residents. These could include both officers onboard the vessels, and onshore staff. For instance, cargo officers may need to pick up basic digital skills, perform first-level trouble shooting onsite, and understand cybersecurity concepts to perform their new role competently. Onshore, the reduction in data entry work relating to bunkering can free up administrative personnel to be reskilled to perform other roles in the company.

Career Conversion Programme for Sea Transport

The Singapore Shipping Association (SSA) is the appointed partner for the Career Conversion Programme (CCP) for the Sea Transport sector. The CCP for Sea Transport supports the reskilling of workers to enable technology adoption and accelerate business transformation. It provides salary support for workers for up to 3 months. Depending on the age of the worker, the salary support levels are:

- Standard rate: 70% of monthly salary, capped at S\$4,000/month.
- Enhance rate for local trainees 40 years old and above: Up to 90% of salary, capped at S\$6,000/month.

Please visit the following websites below for more information on eligibility criteria and application guidelines:

- i. **Workforce Singapore (WSG)** - <https://www.wsg.gov.sg/home/individuals/attachment-placement-programmes/career-conversion-programmes-for-individuals>
- ii. **SSA** - <https://www.ssa.org.sg/career-conversion-programme/>

18. What is the deadline to apply for the funding support?

CCP is an ongoing programme, and companies are required to have their applications approved before they can commence On-The-Job Training. Therefore, companies are encouraged to send in their applications to SSA at least 1 to 2 months before the targeted commencement date.

19. Is the funding support guaranteed?

Each grant application will be assessed accordingly. Companies can check with SSA directly for their grant application status.

20. Can I apply for the funding support more than once?

Yes, companies can apply for the funding support more than once, so long as the employees in each application are different.

21. How long will it take to process my grant application?

It is subject to the processing turnaround time of each funding agency. Typically, grant application review can commence once the funding agency have received a complete grant application form with all supporting documents properly furnished.

We recommend that you study the application requirements of the grant carefully before submitting your grant application.

22. I have already signed a contract with my solution vendor. Am I still eligible for any support?

Support under CCP grant can still be tapped on for the upskilling needs of your workforce relating to digital bunkering on an ongoing basis.

On the upcoming phases of digital bunkering, MPA will continue to explore availability of other relevant support for future implementation.

ADD-ON NEW FAQs

23. Will eBDNs be implemented for other fuels besides conventional and biofuels?

eBDNs will apply for all fuels that uses MFM. MPA is working towards incorporating new alternative fuels in the later stages of Digital Bunkering.

24. What happens if an error is found in the eBDN submitted to MPA?

A new eBDN should be re-generated and re-signed by both the cargo officer and the Chief Engineer or Master (or their authorised representative), after which this new amended eBDN should be submitted to MPA and MPA should be informed of the changes.

25. Does the vessel require an electronic stamp or any other alternative method to validate the eBDN?

Similar to the paper BDN the necessary stamps and signatures would be required for eBDNs.

26. In the event of a discrepancy or disagreement with the bunkering details, what is the recommended process for issuing a Letter of Protest to the supplier under digital bunkering?

The process would be similar to the current paper process but done electronically through the respective provider's application.

27. Will there be any changes in the process for biofuel bunkering for digital bunkering, and are there any additional considerations for endorsing biofuel transactions?

For Biofuels, the digital bunkering process would be similar to the current process.

28. How will the supplier provide the "Proof of Sustainability" and "Certificate of Quality" documents in the case of biofuel bunkering?

The process would be similar to the current paper method. For the ISCC value, we understand that this value might be unavailable during bunkering operations, thus Bunker Suppliers may update the value in BSMS afterwards once the value is made available.

29. Is the vessel permitted to refuse an eBDN if it is from a digital bunkering solution that is not listed on an approved "whitelist"?

Only solutions approved by MPA should be used, these solutions would include solutions whitelisted for industry use (as listed on our website), as well as MPA approved in-house solution by suppliers (i.e., Equatorial Marine Fuel Management Services, Grandeur Trading and Services).

30. For eBDN archival, is it stored on vendor or bunker supplier's database?

The solutions should allow customer data to be stored on vendor or/and bunker suppliers data storage depending on the commercial arrangement between the parties. For storing on bunker supplier's own system/cloud, such system must also comply with the strict requirements stated in our whitelist including cybersecurity and testing.

31. What happens if the digital bunkering solution is delisted by MPA?

The whitelisting status of the digital bunkering solution will be updated on MPA's website. We will also notify the bunker suppliers and work closely with them to transition to an alternative whitelisted solution.