

Port Marine Circular on Digital Bunkering FAQs

Implementation/ Operations

1. What is the implementation timeline for Digital Bunkering?

In the near future, MPA will be requiring the bunker suppliers to provide digital bunkering and electronic bunker delivery notes as a default. Since 1 November 2023, MPA has been working closely with the industry to prepare all stakeholders for mandatory implementation. All MPA licenced bunker suppliers and craft operators are strongly encouraged to adopt Digital Bunkering early, for the familiarisation of the cargo officers and crew. The Annex of PMC (No. 12 of 2023) provides the guidelines for the use of Digital Bunkering for the bunker supplier, bunker craft operator and vessel receiving bunkers.

2. For suppliers that adopt Digital Bunkering, can they still 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 volume. Manual reporting via digitalPORT@SG™ portal can still be done 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 and 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 bunker 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?

The MPA-whitelisted Digital Bunkering solutions can be implemented in Singapore. The updated list of whitelisted solutions is available at <http://www.go.gov.sg/digital-bunkering>.

6. Can hard copy BDN be issued to vessel?

Bunker suppliers can still issue paper BDN. However, suppliers are strongly encouraged to adopt Digital Bunkering early to familiarise the crew and customers well before mandatory implementation and enjoy the benefits. Suppliers that adopted Digital Bunkering solution will not be required to issue physical BDN. However, if the situation necessitate, supplier could use the eBDN as the original record to generate the paper BDN. Bunker suppliers that have implemented Digital Bunkering solutions should encourage 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 not required to go onboard the receiving vessel for bunkering paperwork, as the unique link or device can 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 the applicable requirements of the flag/class. MPA must be updated on the service providers, the suppliers and the barges that have been upgraded for Digital Bunkering. Modification of the MFM or the MFM system is normally not 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 bunker supplier/craft operator shall inform their customer and Master/Owner in advance regarding the conduct of Digital Bunkering and the issuance of eBDN. 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. Bunker supplier/craft operator should encourage their customers on the use of eBDN.

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

MPA's approval is not required for the change of digital solution providers within MPA's whitelist.

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, will 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 18.6 of MARPOL Annex VI, the eBDN must 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 exercise 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.

16. What happens in the event of network unavailability?

Bunker companies are recommended to equip their barges with reliable internet connection on board, e.g. 5G+4G/LTE antenna, Satcomm, etc. The barges may also share their Wi-Fi hotspot with the receiving vessel if required.

Nevertheless, all whitelisted solutions are provided with offline mode capabilities with local authentication, to complete the electronic workflow and documentation in the event of network unavailability.

17. What happens in the event of IT system outages?

Bunker suppliers/ craft operators must put in place measures to ensure operation resiliency and business continuity. In situations where the bunkering documentations cannot be completed electronically, the bunker suppliers/ craft operators shall revert to

manual paperwork and processes. The bunker suppliers shall also inform MPA and manually report the bunker sales volume via digitalPORT@SG™ portal.

Standards Development

18. Will Digital Bunkering be incorporated into Singapore standards for bunkering?

The revision of the existing SS648:2019 Code of Practice of Bunker Mass Flow Metering is being developed by the industry-led Singapore Standards Council to support electronic bunkering documentation and is expected to be completed in 2024. A new Specification for Digital Bunkering Supply Chain documentation is expected to be published by end of 2024 to enable standards and interoperability across different systems.

Support for Companies

19. What support is available for the adoption of Digital Bunkering? How do we apply for such support?

MPA is committed to supporting companies seizing this opportunity to transform. We are working with Enterprise Singapore, Workforce Singapore, and National Trades Union Congress to support you on this digitalisation journey.

Career Conversion Programme for Sea Transport Professionals and Associates

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.

The Career Conversion Programme (CCP) for Sea Transport Professionals and Associates supports the reskilling of workers to enable technology adoption and accelerate business transformation. It provides salary support for workers for up to 6 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 Singapore Citizens/ Permanent Resident trainees 40 years old and above: Up to 90% of salary, capped at S\$6,000/month.

For CCP – Job Redesign Reskilling (JRR), this 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 WSG at least 1 to 2 months before the targeted commencement date.

You can visit <https://www.wsg.gov.sg/home/individuals/attachment-placement-programmes/career-conversion-programmes-for-individuals> for more information on eligibility criteria and application guidelines.

NTUC Company Training Committee Grant

The NTUC Company Training Committees (CTCs) grant supports companies to implement transformation plans that would lead to better worker and business outcomes. Both unionised and non-unionised entities can work with NTUC to form a CTC.

Companies can engage NTUC's e2i at www.e2i.sg/ctcqueries on their project applications, and the exact areas of support, before submission.

Please visit <https://www.ntuc.org.sg/uportal/programmes/company-training-committee-grant> for more information on eligibility criteria and application guidelines.

20. Is the funding support guaranteed?

Each grant application will be assessed by the respective funding agency. Companies can check with the respective funding agency directly for their grant application status.

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

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

22. 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 each grant carefully before submitting your grant application.

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

Support under CCP and NTUC's CTC grant can be tapped on for the upskilling needs of your workforce relating to Digital Bunkering.

Nonetheless, Digital Bunkering has further phases in the pipeline. MPA will continue to explore availability of support for future implementation, such as the NTUC CTC Grant.