



Implementation of “Just-in-Time” for tankers in Singapore

The Maritime and Port Authority of Singapore (MPA) will be implementing the “Just-in-Time” (JIT)¹ concept for tankers from 1 January 2024.

The decision was taken in view of the planned reduction in anchorage spaces in Singapore. The JIT was introduced to support optimal passage planning for vessels calling Singapore and includes a one-stop platform for the booking of marine services and using the Single Window Port Clearance² that has also been implemented by MPA.

In addition, Singapore’s VLCC anchorage (AVLCC) is expected to be removed to make way for the last phase of the Tuas Port Development before 2024.

The JIT for tankers is only applicable to a tanker’s first berthing in Singapore. Subsequent movements within the port by the tankers will be subjected to MPA’s requirements/ policies. MPA may not allow a vessel to enter Singapore if there are no activities planned in Singapore.

Background

The MPA first approached INTERTANKO in August 2020 to discuss its proposed plan to discontinue the AVLCC and request for inputs from INTERTANKO’s Members on potential issues that MPA would need to address, in coordination with relevant agencies, prior to the discontinuation of the AVLCC. In addition, MPA sought INTERTANKO’s assistance to solicit feedback from the tanker community and to identify anticipated issues that would need to be addressed by the various authorities before applying the JIT to the tanker sector.

The requests were discussed at INTERTANKO Asian Regional Panel meeting in October 2020. Further comments and inputs were provided by our Members between November 2020 and January 2021. These were presented to MPA in February 2021.

Among the issues identified by INTERTANKO Members, and communicated to the MPA were:

- i. The need for alternative anchorages to enable tankers to “wait” safely, if their assigned berth is not ready, before they are allowed to enter Singapore.

¹ The JIT concept or ‘direct berthing’ aims to enhance the turnaround time of vessels in port and optimise planning of port resources and services by providing visibility of calling vessels’ and port’s resources so that collaborative decision-making can take place in advance, electronically and in near real-time. Real time information on vessel arrival time at port, pilot boarding time on vessel and berthing time at terminal could be shared with port stakeholders (e.g., MPA, Immigration authority, shipping agents, ship Masters, terminal operators and service providers) to allow better coordination, planning and allocation of port resources. Likewise, availability of port resources (e.g., berth, pilot, tug, bunker, supplies and clearance) could be shared in advance so that calling vessels could adjust their sailing speed, route or time of arrival at various locations in port.

² The Single Window Port Clearance enables shipping companies to submit, track and receive approval for arriving and departing ships through a portal. The portal enabled 16 separate forms across multiple agencies pertaining to vessel, immigration and port health clearances to be consolidated into a single application.

- ii. The need to make provisions for port-related activities that are usually conducted at anchorages to instead be authorised to be conducted as the tanker undergoes cargo operations (e.g. immigration clearance, stores, surveys by Class, inspections, bunkering, etc.).

INTERTANKO subsequently engaged both Indonesia's Directorate General of Sea Transportation and Malaysia Marine Department to identify anchorages that could be used by Singapore-bound tankers to anchor safely should they need a place to anchor.

[Indonesia identified six anchorages within the Riau islands](#) where Singapore-bound tankers could anchor safely while waiting to enter Singapore. The identified anchorages are at Tg Balai Karimun, Nipa Island, Galang Island, Kabil Island, Tanjung Berakit and Batu Ampar/ Sekupang terminals. Indonesia took into consideration INTERTANKO's request for the anchorages to provide ship-related activities including crew change.

Malaysia identified the [Sungai Udang port](#), along the Strait of Malacca and the [anchorages and lay-up areas, that are located off eastern Johore](#). Ship related services could be conducted in the identified areas. For crew change, Sungai Udang could be considered as it is located about 1.5 hrs from Kuala Lumpur International Airport.

MPA has secured agreement with all terminals in Singapore to allow port-related activities to be conducted at the terminals. MPA will be using the digitalPORT@SG to provide real time information for JIT vessel arrival and access to marine services as well as its Active Anchorage Management System to manage their anchorages with a view to not allowing vessels to remain if they have no scheduled activities.

On the commercial impact, the Commercial and Market, Legal Committee as well as the Documentary Committee are reviewing INTERTANKO's Emissions Reductions Clauses (aka Virtual Arrival) for the purposes of the JIT concept as well as the MPA's arrival forms.

Singapore's JIT implementation plan

MPA will be implementing the JIT for tankers from 1 January 2024. In addition, Singapore's VLCC anchorage is expected to be removed to make way for the last phase of the Tuas Port Development before 2024.

MPA will be providing at least 72-hours notification to Singapore-bound tankers on their berth allocation, and they expect tankers to time their arrival in Singapore accordingly.

MPA is determined to discourage vessels with no planned activities in Singapore from entering its port.

MPA assessed that a 72-hour notification period for vessels coming to Singapore would be sufficient to start the activities needed to facilitate a tanker entering Singapore, undergoing cargo works and re-departing. Concurrent activities such as the provision of supplies, bunkering, crew change and inspections, could be carried out as the tanker undergoes cargo operations.

MPA highlighted that at the 72 hours mark, a Singapore-bound tanker moving from the Indian Ocean will not be close to One Fathom Bank (OFB). If the ETB is not received by the tanker when it is reaching the OFB, the Master has the option to revise the passage plan. If the vessel wishes to continue as planned to pass the OFB, the vessel has the option to anchor at designated anchorages in neighbouring

countries (Malaysia or Indonesia). The vessel could re-submit their electronic pre-arrival notification (ePANS) should there be changes in destinations.

Once the ETB is provided to a vessel, any subsequent changes to the ETB will be notified via the JIT system, which is a live notification system. Should there be any delays to the ETB and that are not the fault of the vessel, MPA is prepared to provide an anchorage space in the port if the delay in ETB is made known to the vessel in less than 12 hours for vessels coming from the west and six hours for vessels coming from the east before the ETB.

For a tanker with multiple calls at various terminals in Singapore, the JIT will apply to the tanker's first berthing in Singapore. If there are delays for subsequent berths, the tanker may be allowed to anchor at Singapore's anchorages subject to the tanker's confirmed/planned schedule.

Ships calling Singapore for husbandry services would still be allowed to enter Singapore. They would need to have activities planned during their stay in Singapore. MPA may not allow a vessel to enter Singapore if there are no activities planned in Singapore.

MPA may direct vessels that stay beyond 36 hours without a valid reason (i.e. no activities scheduled in Singapore) to leave port.

Active Anchorage Management System

In parallel to the JIT, Singapore will be implementing the Active Anchorage Management System (AAMS) where vessels will be required to apply for the use of anchorage space and will be given approval subject to availability of space. MPA intends to interface both the AAMS and JIT in mid-2024. This will impact tankers calling at multiple terminals and anchorage in the same voyage as well as those that are calling Singapore for husbandry services.

FAQs- responses for Q1 to Q13 are provided by MPA

Q1 What is the earliest when the Estimated Time of Berthing (ETB) will be made available in the digitalPORT@SGTM – Just in Time Planning and Coordination Platform?

A1 The terminals endeavour to provide the ETB and berth information for the vessel's first berthing at least 72 hours before the vessel arrival.

Q2 Will the draft restricted vessels be impacted for OFB transit?

A2 The first berthing of the vessel will be provided at least 72 hours prior to the vessel arrival. Therefore, the vessels will not even be close to OFB. Shipmasters have the option to revise the passage plan well in time to meet JIT requirements. If the vessels wish to continue as planned for passing OFB, vessels have the option to anchor at designated anchorages in neighbouring countries.

Q3 What happens if there are last minute changes to berthing time, especially for deep draft vessels? Will this require a new arrival submission?

A3 The JIT system will notify the stakeholders of any subsequent change in ETB. MPA is prepared to provide an anchorage space in the port for the vessel if any delay in ETB is made known to the vessel in less than 12 hours for vessels coming from west and six hours for vessels coming from the east before ETA, considering the safety concerns, given the short notice in the change of ETB.

The digitalPORT@SGTM allows the resubmission of ePANS for the same vessel call, should there be any changes.

Q4 Who decides on the ETB? Terminal or MPA?

A4 ETB and the Berth ID is provided by the Terminal.

Q5 For tankers that decide to cross the tidal bars earlier to meet the ETB, will MPA allow them to anchor at Singapore's anchorages pending the berth's availability?

A5 No, unless for an emergency. Under the JIT initiative, the ETB of the vessel's first berthing will be made available at least 72 hours prior to vessel's arrival. Given the 12-hour tidal cycle, the ship Master will have sufficient time to plan and revise the passage plans, if necessary.

Q6 For VLCCs that are tide-bound, will they be allowed to use the anchorage area as they wait for the appropriate tidal conditions?

A6 They will have to comply with the JIT principles of arrival/ETB. Data from MPA showed that an average of one loaded VLCC (maximum two) anchored not more than 24 hrs waiting for first berthing, every fortnightly period.

Q7 Will PMC no. 20 of 2019 be applicable to JIT arrivals or can they be bypassed?

A7 PMC no. 20 of 2019 will still apply.

Q8 Will tankers that are instructed to conduct cargo operations at multiple berths in Singapore be allowed to anchor at anchorages should there be delays at one of their intended terminals, after they complete their cargo work at another terminal?

A8 For the initial implementation of the JIT for tankers, we are looking at the JIT for the first berthing. The current practice for vessels staying beyond 36 hours without a valid reason (i.e. not having any activities) may be directed to leave port, still applies. Please refer to PMC No. 9 of 2015.

Q9 How much liaison has there been with the terminals particularly chemical terminals where multiple berths are required?

A9 MPA is in discussion with all oil and petrochemical terminals for the implementation of JIT.

Q10 What about extra pilotage costs incurred due to JIT?

A10 JIT Platform will facilitate the optimal arrival and departure of vessels to and from the Port of Singapore, which will enable faster ship turnaround time as well as reduce dwell time at the anchorages before berthing. With improvements in operational efficiency, it will reduce the carbon footprint by vessels due to shorter port stays and better voyage planning. Port users will also benefit from savings and cost avoidance from shorter port stays.

Q11 Would ships calling Singapore for husbandry services be subjected to JIT?

A11 MPA will be implementing JIT to the vessels calling the Port of Singapore in phases. For the initial phase, JIT will be implemented to vessels calling the terminals for cargo operations. JIT will be subsequently implemented for vessels calling the anchorages solely for marine services.

Q12 Will there be a JIT clause in the Charter Parties?

A12 MPA will work with the relevant parties to review and consider an appropriate JIT clause for Time and Voyage Charter Contracts.

Q13 What are the results of any trials that have taken place?

A13 JIT trials for containers and bulkers have been successfully conducted. The ship agents and marine service providers will be undergoing training prior to the implementation of JIT for these two sectors. The target of implementation is Sep/Oct 2023. JIT trials for VLCCs commence first, scheduled for Sep 2023.

Considerations that owners/ operators/ charterers would need to take into account.

Q1 What would be the alternative option for tankers should there be delays in scheduled activities planned to be held concurrently during cargo operations (e.g. crew change, stores, bunkers etc.)?

A1 The tanker should liaise closely with her agent and monitor the timing for the scheduled activities that are updated live on the JIT system. Should there be delays, MPA's advice should be sought. The scheduled activities could be conducted at the anchorages, subject to MPA's clearance. Note that MPA's [PMC No. 9 of 2015](#) discourages vessels from staying more than 36 hours in the anchorages without activity. This includes vessels that are idling, waiting for berth or waiting for orders. It does not include vessels carrying out activities (eg repairs, taking bunkers, de-slopping) while waiting for berth or waiting for orders).

Q2 What would be the available recourse to tankers if a terminal objects to the scheduled operations due to the terminal's own restrictions? For example, terminals not allowing SIRE inspectors, class and/or bunker surveyor to conduct inspections/ surveys due to their own internal requirements/ restrictions?

A2 MPA has secured agreement with all terminals in Singapore to allow port-related activities to be conducted at the terminals alongside cargo operations. Tanker owners/agents should plan their activities and seek terminal's prior approval to avoid any unnecessary delay to ship operations.

However, should a terminal indicate their objection to certain activities of the ship, MPA and the INTERTANKO Secretariat should be informed. Approval from MPA should be sought for the activities to be conducted at the anchorages after the cargo work is completed.

Q3 For tankers needing urgent unscheduled repairs and/or needing to undertake rest hours to meet MLC requirements, will the tankers be allowed to anchor at anchorage after cargo operations?

A3 Vessels requiring anchorage space for scheduled or unscheduled repairs or MLC requirements should apply for permission to use the anchorage from MPA's Port master office.

Q4 For tankers that do not have cargo operations in Singapore, would they be allowed to anchor in Singapore for hull cleaning/ inspection to meet AFS/biofouling requirements of their destination ports such as Australia and New Zealand?

A4 There is limited anchorage space in the Port of Singapore. MPA will be implementing Active Anchorage Management System in 2024 and vessels will be required to apply for the use of anchorage space and it will be given subject to availability of space.

Such tankers could consider engaging service providers to conduct the activities in anchorages in Malaysia or Indonesia, subject to the approval of the local authority.

Additional consideration to be added

Q Where could Singapore-bound tankers wait safely while waiting for berths or orders, if they have not received any ETB?

A MPA will not allow vessels to enter Singapore if they do not have any activities scheduled in Singapore.

Hence, Singapore-bound tankers that have not received any ETB and do not have any activities planned while waiting for berths or orders could consider anchoring in anchorages designated by the neighbouring littoral States (Malaysia and Indonesia).

INTERTANKO has worked with both Indonesia and Malaysia to provide ship-related services to tankers to the identified anchorages that Singapore-bound tankers could consider using if they have not received their ETB and/or while waiting for orders.

Q Can tankers anchor at “OPL” around the Straits of Malacca and Singapore?

A The areas that are commonly referred to as “OPL” by the industry are subjected to overlapping territorial claims and boundary negotiations between Indonesia, Malaysia and Singapore. Negotiations between the three governments are still ongoing, and based on precedents, it will take some time before conclusions are reached. The three governments highlighted that there is no designated anchorage space in the “OPL” areas.

Vessels are advised to consider anchoring at the designated anchorages and approved lay-up areas. The littoral States advised that as stated in IMO Circular SN1/Circ 282, vessels are not allowed to anchor in all areas of the Traffic Separation Schemes (TSS) of the Straits of Malacca and Singapore, as well as the landward limits of the TSS and approaches to the ports.

Q Are there any commercial clauses that INTERTANKO has produced for Members to consider for tankers affected by the JIT implementation in Singapore?

A The Commercial and Market, Legal Committee as well as the Documentary Committee are reviewing INTERTANKO’s Emissions Reductions Clauses (aka Virtual Arrival) and considering how best to update them for the purposes of the JIT concept.

For queries and feedback, please email INTERTANKO’s Secretariat at singapore@intertanko.com.