



Monetary Authority of Singapore

Consultation Paper

P008 – July 2023

Consultation Paper on Proposed Measures on Market Integrity in Digital Payment Token Services



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1. Preface

- 1.1. This consultation paper sets out proposed regulatory measures for licensed and exempt payment service providers¹ that carry on a business of providing a digital payment token (DPT) service under the Payment Services Act 2019 (“PS Act”) (collectively known as “DPT service providers” or DPTSPs), as well as prohibitions against unfair trading practices that are generally applicable to all market participants, to address market integrity risks in DPT services.
- 1.2. MAS invites interested parties to provide their comments on the proposals.
- 1.3. Please note that all submissions received will be published and attributed to the respective respondent unless they expressly request MAS not to do so. As such, if respondents would like
 - (a) their whole submission or part of it (but not their identity), or
 - (b) their identity along with their whole submission,to be kept confidential, please expressly state so in the submission to MAS. MAS will only publish non-anonymous submissions. In addition, MAS reserves the right not to publish any submission received where MAS considers it not in the public interest to do so, such as where the submission appears to be libelous or offensive.
- 1.4. Please submit written comments by 3 August 2023 via the link provided [<https://go.gov.sg/mas-dpt-market-integrity-2023>].
- 1.5. Should you encounter any technical difficulties in your submission, please send your enquiry to capital_markets@mas.gov.sg.

¹ These include persons who are currently operating under the transitional exemption as they have been providing DPT services before the commencement of the PS Act and have notified MAS pursuant to the Payment Services (Exemption for Specified Period) Regulations 2019. These entities are not licensed under the PS Act but are allowed to continue to provide DPT services while their licence applications are being reviewed by MAS.



2. Introduction

Recapitulation of MAS' observations on DPT market integrity

2.1. As noted in the *Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services*², DPT markets have been susceptible to unfair trading practices of market manipulation, misleading conduct and insider trading by nefarious actors. Such unfair trading practices distort the price discovery process and undermine customers' trust and confidence in the functioning and integrity of DPT markets. Examples of unfair trading practices include:

- (a) wash trading, which is the buying and selling of DPTs with no change in beneficial ownership, to create a false or misleading appearance of active trading;
- (b) pump-and-dump, where a participant induces an increase in the price of a DPT ("pump") through the dissemination of false or misleading information, such as deceitful marketing and promotional ploys, before selling off his or her own holdings of the DPT ("dump"), ahead of other participants who would have been misled into buying the DPT;
- (c) cornering, which is to use a dominant controlling position in a DPT to influence the price of the DPT and profit from that activity;
- (d) trade spoofing, which is to place orders with the intention of cancelling them prior to being fulfilled, often by deploying trading bots and algorithms, thereby giving the market a false sense of supply or demand; and
- (e) insider trading, which refers to the buying or selling of DPTs while possessing material non-public information, such as an upcoming announcement of a listing decision.

2.2. Customers who transact DPTs through DPT trading platforms expect DPT quotations displayed on the platforms to reliably represent the prevailing market supply and demand, their orders to be matched on an equitable basis, and their counterparties not to have an unfair advantage. In the *Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services*, MAS highlighted the need for DPT trading platform operators to put in place good industry practices to detect and deter unfair trading practices in DPT markets. Examples of good industry practices include:

- (a) Putting in place effective systems, procedures and arrangements to promote fair, orderly, and transparent trading of DPTs traded on their trading platform. As a baseline, DPT trading platform

² P008-2022, published on 26 October 2022.



operators could set out, disclose, and enforce rules governing the trading activities that take place on their DPT trading platforms; and

- (b) Monitoring trading activities that take place on DPTSPs' trading platforms, such as through employing real-time surveillance systems. In the *Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services*, MAS noted that the technological solutions for real-time DPT market surveillance were still evolving, but nevertheless, DPT trading platform operators could conduct market surveillance in a manner that is commensurate with the nature, scale and complexity of their businesses.

Impetus for MAS' proposals

- 2.3. Respondents to the *Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services* broadly agreed with MAS' observations and supported MAS' encouragement of DPT trading platform operators to put in place good practices. Some respondents suggested that MAS should impose mandatory requirements and specific prohibitions against unfair trading practices.
- 2.4. Since the publication of the consultation paper, regulatory authorities globally have further recognised the need for international consensus to address market integrity concerns in an effective and coordinated way. In May 2023, IOSCO published draft policy recommendations to address market integrity and investor protection issues in crypto-asset markets. A few jurisdictions have also taken steps to address market integrity risks in DPT markets, such as the European Union which has introduced prohibitions against unfair trading practices under its Regulation on Markets in Crypto Assets. In line with global developments, MAS is proposing regulatory measures for DPTSPs to address market integrity risks and prohibitions against unfair trading practices which are generally applicable to all market participants.
- 2.5. The remainder of this paper is structured as follows. Chapter 3 sets out the proposed regulatory measures for DPTSPs to address market integrity risks. Chapter 4 sets out the proposed prohibitions against unfair trading practices. Chapter 5 sets out the implementation approach for the proposals.



3. Regulatory Measures for DPTSPs

General requirements

- 3.1. DPTSPs serve as a significant channel for customers to transact in DPTs and participate in other DPT-related products and services. Where DPTSPs have appropriate measures in place to address market integrity risks, customers can expect to transact fairly with their counterparties, with reliable price discovery and settlement processes. However, where DPTSPs do not adequately address market integrity risks, their DPT services are susceptible to exploitation by nefarious actors who perpetrate unfair trading practices, such as market manipulation and insider trading, to obtain dishonest profits and causing harm to other participants. In some cases, DPTSPs are themselves the wrongdoers who deceive unsuspecting customers with disingenuous practices.
- 3.2. As stated in IOSCO's recommendations,³ the regulatory frameworks for DPTs should seek to achieve regulatory outcomes for investor protection and market integrity that are the same as, or consistent with, those required in traditional financial markets. This is premised on the underlying principle of same activity, same risk, same regulatory outcome. As key nodes of the DPT ecosystem, DPTSPs should have measures in place to address market integrity risks.
- 3.3. The types of market integrity risks involved in a DPTSP's service, and consequently the appropriate measures to have in place to address those risks, will depend on the DPTSP's operating model for that service. Similar to traditional financial services, DPTSPs operate a variety of processes in handling and executing customers' orders, such as operating a trading platform to match orders from multiple market participants (similar to a market operator), routing customers' orders to liquidity providers and trading venues (similar to a broker) or transacting on its own account as the counterparty to the customer (similar to a dealer).⁴
- 3.4. Across the various modes of DPT services, customers would generally expect DPTSPs to handle and execute their orders in a fair, orderly, and timely manner, and to prevent and detect unfair trading practices conducted through the DPTSPs' services.⁵ Hence, to address market integrity risks, all DPTSPs

³ Accessible at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD734.pdf>.

⁴ As proposed in the *Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services*, DPTSPs should disclose the manner in which they handle and execute customers' orders (e.g., whether they trade as counterparty against the customer or facilitate trade matching between customers), and the capacity in which they are doing so (e.g., as agent or principal), as these are often opaque or unclear.

⁵ In this regard, IOSCO has made similar observations and proposed recommendations addressing these aspects. In Recommendation 3, IOSCO recommends that a crypto-asset service provider should accurately disclose each role and capacity in which it acts, conflicts when acting in multiple capacities, and how the crypto-asset service provider protects clients against front running trades. In Recommendation 4, IOSCO recommends that crypto-asset service providers should be required to



should maintain adequate systems, processes, controls, human resources, and governance arrangements, in a manner that is commensurate with the nature, scale and complexity of their business, to:

- (a) handle and execute customers' orders in a fair, orderly, and timely manner; and
- (b) prevent and detect unfair trading practices.

3.5. Furthermore, for DPTSPs that operate a trading platform⁶ ("DPT Platform Operator"), market participants would expect a reliable price discovery process that accurately reflects market conditions. Similarly, IOSCO recommends that a crypto-asset service provider acting as a market operator should be expected to have resilient systems to effectively support its operation of a central limit order book in a fair, orderly and transparent manner. Hence, to address market integrity risks, a DPT Platform Operator should ensure that the operation of the DPT trading platform is fair, orderly, and transparent.

3.6. Further details of MAS' expectations in each of these areas are elaborated upon in the paragraphs below.

Question 1. MAS seeks comments on the general requirements for DPTSPs set out in paragraph 3.4 and for DPT Platform Operators set out in paragraph 3.5.

implement systems, policies and procedures that provide for fair, orderly and timely execution of client orders. In Recommendations 8 to 10, IOSCO recommends that there should be effective systems and controls to identify and monitor for manipulative market practices and to prevent leakage of inside information.

⁶ Defined under the PS Act as a "digital payment token exchange", which —

- (a) means a place, or a facility (whether electronic or otherwise), where —
 - (i) offers or invitations to buy or sell any digital payment token in exchange for any money or any other digital payment token (whether of the same or a different type), are regularly made on a centralised basis;
 - (ii) those offers or invitations are intended, or may reasonably be expected, to result (whether directly or indirectly) in the acceptance of those offers or in the making of offers to buy or sell digital payment tokens in exchange for money or other digital payment tokens (whether of the same or a different type), as the case may be; and
 - (iii) the person making any such offer or invitation, and the person accepting that offer or making an offer in response to that invitation, are different persons; but
- (b) does not include a place or facility (whether electronic or otherwise) that is used exclusively by one person to do only either or both of the following things:
 - (i) to make offers or invitations to buy or sell any digital payment token in exchange for any money, or any digital payment token (whether of the same or a different type);
 - (ii) to accept any offer to buy or sell any digital payment token in exchange for any money, or any digital payment token (whether of the same or a different type).



Fair, orderly, and timely handling and execution of customers' orders

- 3.7. To ensure that customers' orders are handled and executed in a fair, orderly, and timely manner, DPTSPs should maintain policies and procedures for handling and executing customers' orders:
- (a) The policies and procedures should include the factors which the DPTSP takes into account (such as price, costs, speed, likelihood of execution and settlement, size and nature of the order) and the considerations for determining the relative importance of the various factors (such as the type of customer and the characteristics of the customer's order), when handling and executing a customer's orders.⁷
 - (b) DPTSPs should not receive any commission or other form of payment from other persons for routing customers' orders to them.
 - (c) When comparable orders are received from different customers, DPTSPs should handle and execute the orders in accordance with the time of receipt.
- 3.8. DPTSPs should also maintain policies and procedures to correct or cancel error trades, taking into consideration the nature of transaction execution (e.g., on-chain or off-chain) and the processes required to correct or cancel those transactions. Electronic systems for entering customers' orders should have pre-trade risk controls to mitigate the occurrence and severity of operational errors (e.g., "fat finger" errors).
- 3.9. To promote transparency and facilitate customers in making informed decisions on DPT services, DPTSPs should disclose the above-mentioned policies and procedures to customers in a clear and precise manner.

Question 2. MAS seeks comments on the further requirements for DPTSPs relating to the fair, orderly, and timely handling and execution of customers' orders.

⁷ For example, market impact (which affects the price at which the customer's order is executed) is more likely to be an important consideration for a large order from an institutional customer, than for a retail customer's order.



Prevention and detection of unfair trading practices

Surveillance

- 3.10. Surveillance is vital to the detection of unfair trading practices which may affect the orderliness and integrity of the market. DPTSPs should conduct surveillance, by monitoring orders and transactions for signs of unusual or suspicious activity, on a real-time basis. Automated surveillance systems should be used where necessitated by the nature, scale, and complexity of the DPTSP's business. Surveillance programs should complement transactional information with relevant external data, such as monitoring of social media and other sources.
- 3.11. DPTSPs should have fair and objective procedures to investigate any potentially unfair trading practices and take appropriate action (e.g., suspension of trading access). DPTSPs should state and explain the types of misbehaviour that constitute an unfair trading practice, as well as its procedures for addressing any potentially unfair trading practice, to customers in a clear and precise manner. Where appropriate, DPTSPs should promptly refer any potential non-compliance or breach to MAS for review.
- 3.12. To enable the reconstruction of trading activity for further investigation, DPTSPs should maintain proper records with adequate details of all on-chain and off-chain orders (including cancellation of orders) and transactions for a period of five years⁸. The records should be readily available to MAS, as and when required.⁹

Management of material non-public information

- 3.13. DPTSPs may come into possession of material non-public information¹⁰ in the course of their business, such as a decision to make a particular product available for trading by its customers. To prevent inappropriate disclosure and misuse of material non-public information, DPTSPs should maintain a controlled list of persons with access to the material non-public information on a need-to-know basis

⁸ DPTSPs are currently required to keep transaction records, pursuant to *Notice PSN02 Prevention of Money Laundering and Countering the Financing of Terrorism – Digital Payment Token Service*. For the purposes of market surveillance, DPTSPs may need to keep records of additional information, such as the entry and cancellation of orders.

⁹ Pursuant to Section 16 of the PS Act, MAS may require DPTSPs to provide such records to MAS.

¹⁰ "Material non-public information" refers to information that is not generally available but, if the information were generally available, a reasonable person would expect it to have a material effect on the price or value of a DPT. In the context of insider trading, a reasonable person would be taken to expect information to have a material effect if the information would, or would be likely to, influence persons who commonly invest in the relevant products in deciding whether or not to subscribe for, buy or sell those products.



(“privy persons list”) and information barriers¹¹ to restrict access of such information to this list of persons.

- 3.14. The privy persons list should record the identity of the persons, the circumstances under which they had access to the material non-public information, and the period during which they had access. Where material non-public information is disclosed to external parties, the external parties should also be recorded on the privy persons list, and the DPTSP should have the necessary confidentiality agreements in place with them to safeguard the confidentiality of the material non-public information.
- 3.15. DPTSPs should also maintain policies and procedures in relation to personal trading activities by its officers and employees, which should address the following:
 - (a) pre-dealing procedures, such as approval or notification requirements for officers and employees who may come into possession of material non-public information;
 - (b) post-dealing procedures, such as records of the executed transactions or the fact that the transaction was not executed;
 - (c) periodic education, monitoring, and review to ensure compliance with its policies and procedures; and
 - (d) restrictions, such as periods during which no transactions are permitted (“black-out periods”).

Question 3. MAS seeks comments on the further requirements for DPTSPs relating to the prevention and detection of unfair trading practices.

Fair, orderly, and transparent operation of DPT trading platforms

- 3.16. DPT Platform Operators should maintain business rules that make satisfactory provision for the DPT trading platform to be operated in a fair, orderly, and transparent manner.

¹¹ These should include physical barriers (e.g., segregated office spaces) as well as technological controls (e.g., user permissions for access to electronic data, information and records).



Fair

- 3.17. A fair trading platform is characterised by proper trading practices and non-discriminatory access to the trading facility and related information, such that customers have confidence that their counterparties would not have an unfair advantage over them.
- 3.18. To operate the DPT trading platform in a fair manner, DPT Platform Operators should have clear rules:
- (a) setting out access criteria that is objective, non-discriminatory, and transparent to existing and prospective customers;
 - (b) governing its execution protocols, which provide customers with non-discriminatory access to bids and offers, and match bids and offers on an equitable basis (e.g., in accordance with price-time priority); and
 - (c) prohibiting unfair trading practices.

Orderly

- 3.19. An orderly trading platform provides the expectation that it will function smoothly on a continuous basis. Its trading processes should guard against excessive price movements and ensure that trades are reliably concluded.
- 3.20. To operate the DPT trading platform in an orderly manner, DPT Platform Operators should have clear rules on:
- (a) the correction or cancellation of error trades;
 - (b) the controls to prevent potential disorderly trading, such as order entry controls; and
 - (c) the corrective action to be taken to avoid or rectify disorderly trading conditions, such as suspension of trading.

Transparent

- 3.21. Transparency is the degree to which information is made publicly available on a real-time basis. Price formation and discovery are intrinsic to any well-functioning trading platform, which requires material information to be disseminated to customers in a timely, transparent and comprehensible manner.



- 3.22. To operate the DPT trading platform in a transparent manner, DPT Platform Operators should have clear rules on:
- (a) the dissemination of pre-trade information (e.g., best bids and offers) and post-trade information (e.g., prices, volumes, and trade times of concluded transactions) to customers on an uninterrupted basis, which should apply to both on-chain and off-chain activity; and
 - (b) the dissemination of alerts on unusual trading activity (possibly caused by false statements or leakage of material non-public information) warning customers to exercise caution.

Question 4. MAS seeks comments on the further requirements for DPT Platform Operators relating to the operation of DPT trading platforms in a fair, orderly, and transparent manner.



4. Prohibitions Against Unfair Trading Practices

Introduction

- 4.1. Statutory prohibitions against unfair trading practices seek to ensure that wrongdoers are brought to task, and are intended to shape the behaviour of market participants by deterring them from engaging in similar misconduct.
- 4.2. In relation to capital markets products, such prohibitions on unfair trading practices are set out in Part 12 of the Securities and Futures Act (“SFA”). Any person who contravenes the provisions in Part 12 of the SFA is guilty of an offence and may be subject to criminal prosecution or regulatory civil penalty action. Aggrieved persons may also bring civil actions in the courts against the contravening person.
- 4.3. While the market structures and regulatory frameworks may differ in some respects between capital markets products and DPTs, the unfair trading practices perpetuated in the DPT markets do not appear dissimilar to those in the capital markets. Hence, MAS proposes to introduce provisions that prohibit similar unfair trading practices in the DPT markets.

Unfair trading practices

Prohibited conduct

- 4.4. MAS proposes to introduce provisions for DPTs that are similar to the following SFA provisions, with the necessary modifications for the provisions to apply in relation to DPTs (instead of securities, securities-based derivatives contracts, or capital markets products, as the case may be):
 - (a) false trading and market rigging (Section 197 of the SFA);
 - (b) market manipulation (Section 198 of the SFA);
 - (c) false or misleading statements (Section 199 of the SFA);
 - (d) fraudulently inducing persons to deal (Section 200 of the SFA); and
 - (e) employment of manipulative and deceptive devices (Section 201 of the SFA).



- 4.5. As regards bucketing (Section 201A of the SFA) and cornering (Section 201B of the SFA), notwithstanding that the SFA provisions apply to spot leveraged foreign exchange trading, derivatives contracts and underlying things, MAS is of the view that these are also relevant for DPTs and proposes to introduce similar provisions, i.e.:
- (a) **Bucketing:** A person must not knowingly execute, or hold himself, herself or itself out as having executed, an order to make a purchase or sale of a DPT, without having effected in good faith a purchase or sale in accordance with the order.
 - (b) **Cornering:** A person must not, directly or indirectly, corner, or attempt to corner, any DPT.
- 4.6. As regards the dissemination of information about illegal transactions (Section 202 of the SFA), MAS proposes to introduce similar provisions for DPTs, with the necessary modifications for the provisions to apply in relation to DPTs and the scope of contravention to cover the prohibited conduct proposed in paragraphs 4.4 and 4.5.

Question 5. MAS seeks comments on the proposed provisions relating to prohibited conduct.

Insider trading

- 4.7. MAS proposes to introduce provisions for DPTs that are similar to the SFA provisions on insider trading (Sections 213 – 231 of the SFA) –
- (a) with the necessary modifications for the provisions to apply in relation to DPTs; and
 - (b) excluding Sections 222¹², 223¹³, and 230¹⁴ of the SFA, as MAS is of the view that the circumstances addressed in those Sections are not relevant for DPTs.

Question 6. MAS seeks comments on the proposed provisions relating to insider trading.

¹² Section 222 of the SFA relates to the exception for redemption of units in collective investment schemes.

¹³ Section 223 of the SFA relates to the exception for underwriters.

¹⁴ Section 230 of the SFA relates to the holder of a capital markets services licence.



Other provisions

- 4.8. Divisions 4 – 6 in Part 12 of the SFA provide for civil penalty actions, civil remedies, attribution of liability and other related areas. MAS proposes to introduce provisions for DPTs that are similar to these SFA provisions, with the necessary modifications for the provisions to apply in relation to DPTs.

Question 7. MAS seeks comments on other proposed provisions relating to the prohibitions against unfair trading practices.



5. Implementation Approach

Implementation of proposed regulatory measures for DPTSPs to address market integrity risks

- 5.1. To implement the proposed regulatory measures, taking into account responses to this consultation paper, MAS intends to issue Guidelines to set out our expectations for DPTSPs as regards market integrity risks, as a first step to implementing the proposals. Thereafter, details on the regulatory requirements and subsidiary legislation will be separately published for consultation in due course. MAS will closely engage with DPTSPs to ensure that the measures are able to be implemented in a timely and practicable manner.

Question 8. MAS seeks comments on the implementation of the regulatory measures.

Implementation of proposed prohibitions against unfair trading practices

- 5.2. To implement the proposed prohibitions against unfair trading practices, MAS will amend the Payment Services Act or other Acts administered by MAS, as appropriate. The Act amendments will be separately published for consultation in due course.



6. List of Questions

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