J.P. Morgan Securities Australia Limited DMA TRAINING MATERIAL

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Overview of Direct Market Access

Direct market access (DMA) trading occurs when a client is provided with direct electronic access to an Australian market operator's trading platform via a trading participant's automated order processing system (AOP).

All DMA trading conducted on either the Australian Securities Exchange (ASX) or the Chi-X Australia Market (Chi-X) must comply with the Corporations Act and other relevant statutes and regulations applicable in Australia, the ASIC Market Integrity Rules (Securities Markets) 2017 ("ASIC Market Integrity Rules"), the ASX Operating Rules and Procedures, the Chi-X Operating Rules and Procedures.

This document summarises the key rules applicable to you (the client) when using J.P. Morgan Securities Australia Limited's (JPMSAL) DMA infrastructure. You must look at the relevant provisions of the ASIC Market Integrity Rules, the relevant market's (ASX and Chi-X) Operating Rules and Procedures and the Corporations Act to ensure you have a comprehensive understanding of the requirements imposed on you in relation to your DMA trading using JPMSAL's AOP system.

If you trade on exchanges other than ASX and Chi-X using DMA, similar rules will apply and you must make sure that you comply with those rules.

You represent and warrant to J.P. Morgan that you are, and J.P. Morgan shall be entitled to treat you as, a "Wholesale Client" or "Professional Investor" as defined in the Corporations Act 2001 (Cth).

Please notify us immediately if, at any point in time, you consider that you would no longer fall within the definition of those terms.

Best Execution

J.P. Morgan is required to handle and execute client orders in accordance with the best execution obligation in Rule 3.8.1 of the ASIC Market Integrity Rules. That Rule requires J.P. Morgan to take reasonable steps to obtain the best outcome for you when handling and executing your orders.

In assessing the best outcome for you, J.P. Morgan will have regard to those factors described in detail in its Best Execution Disclosure, a copy of which is available to you.

Where you choose to execute an order via a J.P. Morgan Direct Market Access ("DMA") system, you will select parameters of the trade (such as the price, the counterparty, the venue, the timing, the size and nature of the interaction with your selected execution venue).

In such a case, J.P. Morgan, while acting on your behalf in providing the DMA service, will be treated as having satisfied its duty of best execution and you will be treated as having given specific instructions for the entirety of your order by means of the DMA system. In cases where you do not select any parameters, then J.P. Morgan will select execution venues in accordance with its Best Execution Policy.

Section 1041A of the Corporations Act

You must not take part in, or carry out a transaction or a series of transactions that have or are likely to have the effect of creating an artificial price for trading in financial products on a financial market, or maintaining a level that is an artificial price for trading in financial products on a financial market.

Section 1041B of the Corporations Act - False Trading and Market Rigging, and ASIC Market Integrity Rules 5.7.1 & 5.7.2- Manipulative Trading

You must not make a bid or offer for, or deal in, securities on your own account or on account of any other person where:

- you intend to create;
- you are aware that a person intends to create; or
- taking into account the circumstances of the order, you ought reasonably suspect that you have placed the order with the intention of creating, a false or misleading appearance of active trading in any securities or with respect to the market for, or the price of, any securities.

ASIC Market Integrity Rule 5.7.2

In considering the circumstances of the order, you must have regard to the following matters:

- whether the order or execution of the order would be inconsistent with the history of recent trading in that security;
- whether the order or execution of the order would materially alter the market for, or the price of, the securities;
- the time the order is entered or any instructions concerning the time of entry of the order;
- whether the person on whose behalf the order is placed may have an interest in creating a false or misleading appearance of active trading in any securities or with respect to the market for, or the price of, any securities;
- whether the order is accompanied by settlement, delivery or security arrangements which are unusual;
- where the order appears to be part of a series of orders, whether when put together with the other orders which appear to make up the order or series is unusual;
- whether the order appears to be a legitimate commercial reason for that person placing the order, unrelated to an intention to create a false or misleading appearance of active trading in or with respect to the market for, or the price of, any securities; and
- whether the transaction, bid or offer the execution of which is proposed will involve no change of beneficial ownership.

Indicators of Market Manipulation

Set out below are some examples of indicators of manipulative trading. Where your orders exhibit any one or more of these characteristics, this may result in the immediate termination of your access to J.P. Morgan's DMA services:

- marking the close purchases or sales of small volumes of securities at or near close of the market, which fix, or attempt to fix, a higher or lower closing price;
- regular purchases on the up-tick, or sales on the down-tick, to generate price movements;
- consistently appearing as the highest bidder, which may be intended to support or increase the price of securities;
- layering of BIDS/ASKS placing of buy or sell orders at various price steps below or above the market to create a false appearance of buying/selling demand;
- entering large orders just below the best bid or above the best offer (ie providing a floor or ceiling). Another feature of this type of trading may be the amendment or cancellation of the order when it looks like the order may trade;
- entering large orders on the opposite side of the market to that in which a genuine order is to be executed;
- domination and control of the market for a stock purchasing enough volume that you may artificially set prices. This might be followed by up-ticking the bid to desired (artificial) levels despite the absence of bona fide demand for the stock;
- executing trades where there is no change of beneficial ownership; and/or
- engaging in any other conduct that constitutes a breach of Part 7.10 of the Corporations Act or Part 5.7 of the ASIC Market Integrity Rules.

Examples of creating a false and misleading market appearance

Below are examples of where a person may possibly create a false and misleading market appearance using the DMA system.

You may create a false and misleading market appearance if:

- you move a stock price more than 5-10% over the course of one day;
- you execute an order or series of orders over the course of a day that results in you being the main trader for volume over the course of the day;
- stacking the BID/ASK schedule with orders that you do not intend to execute; and/or
- you place orders at the end of the day that will have the effect of increasing or decreasing the closing price of a security.

Moving the price of shares over the course of one day

Where a person moves the price of a stock over the course of the day, particularly by a large amount, their trading activities are likely to receive closer scrutiny from ASIC.

If the trading that resulted in the price movements (up or down) has been undertaken with the intention of creating a false and misleading appearance of active trading or with respect to the market for, or the price of, any securities, this would be contrary to the Corporations Act and the ASIC Market Integrity Rules.

You must not enter into or engage in a fictitious or artificial transaction if that transaction results in:

- the price for trading in financial products being maintained, increased or decreased; or
- fluctuations in the price for trading in financial products.

Crossings

There are a number of provisions contained in the ASX Operating Rules and ASIC Market Integrity Rules that govern crossings. Those rules prohibit certain types of crossings at certain times.

Examples include ASX Operating Rule 4060 and ASIC Market Integrity Rule 6.2. Those rules are aimed at achieving three main objectives:

- investor protection;
- market quality; and
- providing incentives to Trading Participants to bring orders and, therefore, liquidity to the market.

Wash trades

In general, all trades must involve a change in beneficial ownership. This means that a person or their associate who had an interest in the shares before the sale or purchase must not have an interest in the shares after the sale or purchase.

Trades that involve no change in beneficial ownership, known as 'wash trades', are deemed to be manipulative trades and, therefore, an offence under the Corporations Act

ASX Operating Rule 4060 prohibits crossings using Automated Order Processing ("AOP") systems where the same Authorised Person enters both sides of the crossing. (Note: There is no similar requirement in the Chi-X Operating Rules or Procedures).

The ASX Operating Rules define an Authorised Person as a person who is either a client of a trading participant or an agent of a client who is permitted to submit orders into the trading participant's system.

Under the ASX Operating Rules, it does not matter if the client wants to do a crossing using AOP between distinct sub-accounts where there will be a change of beneficial owner as the above ASX Operating rule prohibits this activity through AOP systems. This is not the case under the Chi-X Operating Rules.

Sales of Securities

When placing sell orders with J.P. Morgan using DMA, you must indicate on your order whether the sale is a "Long Sale" or "Short Sale".

You must only sell securities to a buyer if, at the time of the sale, you have or, if you are selling on behalf of another person, that other person has, a presently exercisable and unconditional right to vest the securities in the buyer.

If you are unsure what your obligations are under the short sale requirements, you should seek your own legal or compliance advice prior to giving sell orders to J.P. Morgan.

You must comply with any obligations imposed on you under the law with respect to short sales.

Where you are required by law or regulation to report your short positions to a regulator, the obligation to comply with that requirement is yours and not J.P. Morgan's.

Clients entering orders via DMA need to be mindful that orders placed into the market at month end, quarter end, end of financial/calendar year and around the close of trading each day are very closely scrutinised by ASIC, ASX and Chi-X.

Trade Errors & Cancellations

Chi-X

Chi-X Operating Rules 5.4, 5.5 and 5.6 deal with trade errors, cancellations and dealing disputes.

Under the Chi-X Operating Rules and Operating Rule Procedures, the Market Operator may cancel an error trade:

- with the consent of the parties to the trade (preferred practice); and/or
- where it considers it appropriate to do so.

Cancelling a trade is difficult and may take some time. Cancellation is subject to the agreement of the counterparty to the trade and if they do not agree the matter can be determined by Chi-X. Chi-X may decide not to cancel the trade.

ASX

ASX uses various fixed price ranges within which cancellations either will or will not occur.

Anomalous Order Thresholds (AOT) are used during continuous trading. A dynamic No Cancellation Range (NCR)/AOT Reference Price is determined by ASX for each Equity Market Product, and aggressive orders entered beyond a threshold set at 10% either side of the dynamic No Cancellation Range (NCR)/AOT Reference Price for Equity Market Products priced at or above \$2.35 and at specified tick increments for those Equity Market Products priced below \$2.35 will be rejected.

The AOT will only apply to Equity Market Products quoted on more than one order book during continuous trading. It will apply to orders entered through TradeMatch and PureMatch, subject to the exceptions set out in the ASX Operating Rules and ASX Operating Rule Procedures.

Where the Anomalous Order Threshold Meets the Extreme Cancellation Range

In the situation where orderly trading within the AOT results in trades being executed in the Extreme Cancellation Range (ECR), the security (and all associated instruments, i.e. ETOs, company options, contributing shares, rights issues, interest rate products, warrants, VolumeMatch and PureMatch instruments) will be placed into a *Regulatory Halt* for 2 minutes. The Regulatory Halt Session State has the same parameters as the Pre-Open Session State. At the end of the Regulatory Halt Session State an auction will occur. The purpose of this auction is to allow the resetting of the ECR Reference Price and consequentially, the ECR.

Regulatory Requirements

It is important to note that ASIC conducts real time surveillance of all trading activity on ASX and Chi-X's markets, which will also be the case for any other incoming market operators in the future.

The reputation of Australia's capital markets for fairness and integrity is very important for the Australian economy as a whole. The surveillance of all market activity is an important part of ensuring that the reputation and integrity of Australia's capital markets is maintained.

Where ASIC is concerned about trading activity conducted on any Australian market, it has the power to compel J.P. Morgan to provide information in relation to the trading, including details of the persons responsible for the relevant activity.

ASIC administers and enforces company and financial services laws to protect consumers, investors and creditors. It has extensive investigative and enforcement powers, including powers to compel the production of books and records and the provision of testimony under oath.

Penalties can be imposed on Market Participants by ASIC including fines up to \$1,000,000.00. ASIC can also investigate the activities of individuals who gave instructions to participants.

You must ensure that each order you send through J.P. Morgan's DMA system:

- will not interfere with the efficiency and/or integrity of ASX's and Chi-X's markets;
- complies with all applicable laws and exchange rules;
- is initiated by an authorised user; and
- does not exceed established restrictions and trading limits.

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