



ASIC

Australian Securities & Investments Commission

REGULATORY GUIDE 241

Electronic trading

August 2013

About this guide

This guide is for market participants of the markets operated by ASX Limited (ASX), Chi-X Australia Pty Ltd (Chi-X) and Asia Pacific Exchange Limited (APX) that use or intend to use their systems for automated order processing (AOP), including use in relation to a crossing system.

It gives guidance on how ASX, Chi-X and APX market participants can comply with their obligations under ASIC market integrity rules that apply to the use of AOP.

Note 1: This guidance applies from May 2014. It reflects the ASIC market integrity rules for these markets as amended by the ASIC Market Integrity Rules (ASX Market) Amendment 2012 (No. 3), ASIC Market Integrity Rules (Chi-X Australia Market) Amendment 2012 (No. 3) and ASIC Market Integrity Rules (APX Market) Amendment 2013 (No. 1), which commence in May 2014.

Note 2: References to ASIC Market Integrity Rules (Competition in Exchange Markets) 2011 do not apply to APX because APX is a listing market and does not offer trading services in ASX-listed equity market products.

About ASIC regulatory documents

In administering legislation ASIC issues the following types of regulatory documents.

Consultation papers: seek feedback from stakeholders on matters ASIC is considering, such as proposed relief or proposed regulatory guidance.

Regulatory guides: give guidance to regulated entities by:

- explaining when and how ASIC will exercise specific powers under legislation (primarily the Corporations Act)
- explaining how ASIC interprets the law
- describing the principles underlying ASIC's approach
- giving practical guidance (e.g. describing the steps of a process such as applying for a licence or giving practical examples of how regulated entities may decide to meet their obligations).

Information sheets: provide concise guidance on a specific process or compliance issue or an overview of detailed guidance.

Reports: describe ASIC compliance or relief activity or the results of a research project.

Document history

This guide was issued in August 2013 and is based on legislation which will come into effect in May 2014.

Previous version:

- Superseded Regulatory Guide 241, issued November 2012

Disclaimer

This guide does not constitute legal advice. We encourage you to seek your own professional advice to find out how the Corporations Act and other applicable laws apply to you, as it is your responsibility to determine your obligations.

Examples in this guide are purely for illustration; they are not exhaustive and are not intended to impose or imply particular rules or requirements.

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A Overview

Key points

This regulatory guide contains guidance on how a market participant can comply with the automated order processing (AOP) obligations in the ASIC Market Integrity Rules (ASX Market) 2010, the ASIC Market Integrity Rules (Chi-X Australia Market) 2011 and the ASIC Market Integrity Rules (APX Market) 2013.

This guide contains new guidance and where appropriate incorporates aspects of ASX Guidance Notes 19, 21 and 22. Those ASX guidance notes are superseded by this regulatory guide.

ASIC's market supervision role

- RG 241.1 On 1 August 2010, the Australian Securities and Investments Commission (ASIC) assumed responsibility for supervising domestic licensed markets and participants of licensed markets. This is in addition to our role of supervising compliance by market participants and market operators with other provisions of the *Corporations Act 2001* (Corporations Act), including the Australian financial services (AFS) licensing provisions.
- RG 241.2 Accordingly, also on 1 August 2010, ASIC made the ASIC Market Integrity Rules (ASX Market) 2010, which were based on a subset of the ASX Market Rules as at 31 July 2010. In April 2011, we made the ASIC Market Integrity Rules (Chi-X Australia Market) 2011, which were modelled (as far as possible) on the ASIC Market Integrity Rules (ASX). In July 2013, we made the ASIC Market Integrity Rules (APX Market) 2013 which are modelled on the ASIC Market Integrity Rules (Chi-X). All of these included rules relating to automated order processing (AOP).
- Note 1: In this document 'ASIC Market Integrity Rules (ASX), (Chi-X) and (APX)' refers to the ASIC Market Integrity Rules (ASX Market) 2010, ASIC Market Integrity Rules (Chi-X Australia Market) 2011 and ASIC Market Integrity Rules (APX Market) 2013.
- Note 2: In this document 'Chapter 5', 'Part 5.5' or 'Rule 5.5.1' (for example) refer to a particular chapter, part or rule of the ASIC Market Integrity Rules (ASX), ASIC Market Integrity Rules (Chi-X) and ASIC Market Integrity Rules (APX), unless otherwise specified.
- RG 241.3 There are a number of distinct terms reflecting each step, process and component of the electronic trading cycle, used in the market integrity rules and in this regulatory guide. We refer to AOP, designated trading representatives (DTRs), automated client order processing (ACOP)—also referred to as direct electronic access (DEA)—algorithmic programs and filters. These terms are described and where applicable illustrated in Figure 1 under 'Key concepts' and at RG 241.10–RG 241.23.

Note: For the purposes of this guide, ‘electronic trading’ includes algorithmic programs, AOP, automated client order processing (ACOP) and direct electronic access (DEA). For a discussion of these concepts, see RG 241.9–RG 241.23.

Scope of this regulatory guide

RG 241.4 This regulatory guide gives guidance on a market participant’s obligations under the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) when it uses an AOP system, including use of an AOP system to transmit orders to a crossing system. It covers:

- (a) requirements for AOP (see Section B);
- (b) access by authorised persons (see Section C); and
- (c) review and certification of documentation and systems (see Section D).

Note: Part 5.6 of the ASIC Market Integrity Rules (ASX) and (Chi-X) includes rules for AOP that specifically refer to crossing systems: Rules 5.6.1(iii), 5.6.3(e)(iii) and 5.6.3(e)(iv). There are no equivalent ASIC Market Integrity Rules (APX) for crossing systems.

RG 241.5 In November 2012, we amended Part 5.6 of the ASIC Market Integrity Rules (ASX) and (Chi-X) to:

- (a) require market participants to have direct control over filters and filter parameters, and the capability to immediately suspend, limit or prohibit AOP and suspend, limit, prohibit or cancel trading messages; and
- (b) remove the requirement for market participants to provide certifications and confirmations to ASIC on material changes, but require an annual review and notification to ASIC.

Note: The rules in RG 241.4 and RG 241.5 commence on 26 May 2014.

RG 241.6 In July 2013, we amended the ASIC Market Integrity Rules (APX) to include additional AOP obligations for market participants of the APX market, effective from May 2014. These rules reflect the amended ASIC Market Integrity Rules (ASX) and (Chi-X) as at November 2012.

Note: These amendments commence on 26 May 2014.

RG 241.7 In August 2013, we amended Part 5.6 of the ASIC Market Integrity Rules (ASX) and (Chi-X) in response to growth in the number of market participants establishing and operating ‘crossing systems’ to ensure that the efficiency and integrity of a crossing system is maintained when meeting a market participant’s responsible use and control requirements for AOP.

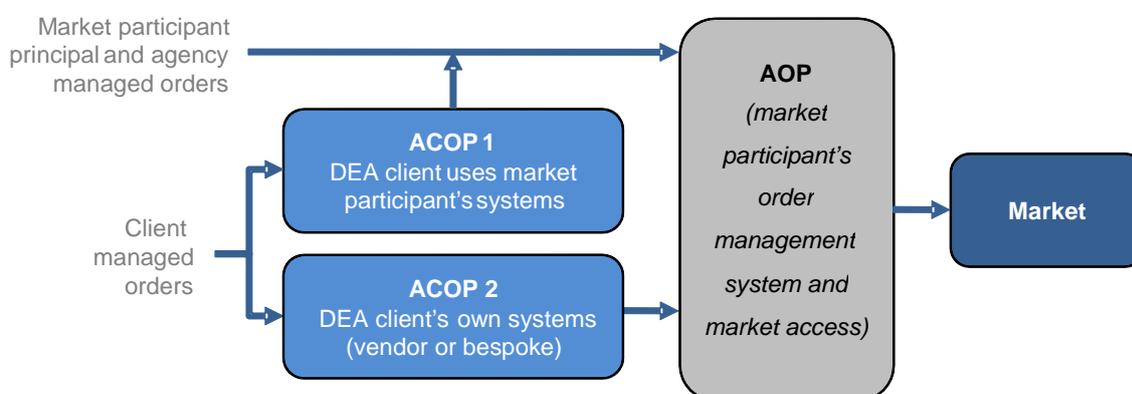
Note: These amendments commence on the day after the end of the period of six months beginning on the day on which ASIC Market Integrity Rules (ASX Market) Amendment (No. 2) 2013 and ASIC Market Integrity Rules (Chi-X Market) Amendment (No. 1) 2013 are registered under the *Legislative Instruments Act 2003*.

- RG 241.8 This guidance applies from May 2014. It is not exhaustive in terms of the arrangements that a market participant could implement to ensure ongoing compliance with these obligations. The arrangements a market participant puts in place should be tailored to and implement technology reflective of the nature, scale and complexity of the market participant's trading through its AOP system.

Key concepts

- RG 241.9 The interaction between AOP, ACOP and the market is illustrated in Figure 1.

Figure 1: Automated order processing and direct electronic access



Source: Consultation Paper *Australian equity market structure: Further proposals* (CP 168).

Automated order processing (AOP)

- RG 241.10 'Automated order processing' (AOP) is the process by which orders are registered in a market participant's trading system and, if accepted for submission into a trading platform by the market participant, submitted as corresponding trading messages without being 'keyed' or 're-keyed' by a DTR: see RG 241.13. 'Trading messages' are messages relating to trading functions, such as orders, amendment or cancellation of orders, and the reporting or cancellation of transactions: Rule 1.4.3.
- RG 241.11 The concept of being 'keyed' or 're-keyed' is critical to the distinction between manual processing and AOP. An order is not an AOP order where a DTR is required to exercise discretion and 'key' or 're-key' an order into a trading platform of a particular market operator after registration (including creation) in a market participant's AOP system.
- RG 241.12 Where a DTR submits an order into a market participant's trading system but a routing decision is subsequently made by that system, the order would be considered an AOP order rather than a DTR order.

DTRs and AOP

- RG 241.13 A market participant must ensure that all trading in a trading platform is carried out either by a DTR, or in accordance with the AOP requirements in Part 5.6 of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX): Rules 2.5.1 and 2.5.3. A DTR is a representative of the market participant who has been authorised by the market participant to submit trading messages to the trading platform on behalf of the market participant and who meets the criteria in Rule 2.5.5.
- RG 241.14 A representative of a market participant that is authorised as a DTR under Part 2.5 may also act in the capacity of an authorised person, by submitting trading messages to the trading platform through an AOP system and in accordance with the AOP requirements: see RG 241.12 and Section C of this guide.

Automated client order processing (ACOP)

- RG 241.15 ‘Automated client order processing’ (ACOP) is AOP for an order submitted by an ‘authorised person’ (being a client, or an agent of a client, of a market participant) into the market participant’s trading system, as distinct from AOP for an order submitted by the market participant as principal: Rule 1.4.3.
- RG 241.16 ACOP is commonly referred to in International Organization of Securities Commissions (IOSCO) documents as direct electronic access (DEA) or direct market access (DMA).

Note: See IOSCO Report, *Principles for direct electronic access to markets* (IOSCOPD332), Technical Committee of IOSCO, 12 August 2010.

- RG 241.17 When using ACOP, an authorised person may use either:
- (a) the market participant’s order management system and algorithmic programs to manage and generate orders (described as ‘ACOP 1’ in Figure 1); or
 - (b) their own systems or programs that are connected to the market participant’s AOP system (described as ‘ACOP 2’ in Figure 1).
- RG 241.18 ACOP enables an authorised person to access a market through a market participant without itself being a market participant, and therefore, without being subject to the market integrity rules and operating rules of that market.

Algorithmic programs

- RG 241.19 AOP systems may use algorithmic programs to generate trading messages in, or through, those systems. For the purpose of this guide, ‘algorithmic programs’ are automated strategies using programmable logic, system-generated (rather than human-generated) messages based on a set of predetermined parameters, logic rules and conditions. These programs include algorithmic trading, automated order generation and automated order routing.

RG 241.20 Algorithmic programs are discussed in more detail at RG 241.91–RG 241.95.

Filters

RG 241.21 ‘Filters’ are a set of rules that apply to an AOP system and that determine automatically which trading messages (or series of related trading messages) meet a pre-defined set of criteria and can pass into a trading platform.

RG 241.22 ‘Filter parameters’ are the variables within each filter that can be changed to modify the operation of the filter without changing the rule to which the filter applies. The filter parameters result in trading messages being handled differently according to factors such as, for example, the type, source, size or price of an order, or its relationship with other orders. A filter parameter may apply at a number of different levels (e.g. to particular financial products, representatives, authorised persons or clients, or to a dollar value level).

RG 241.23 Filters and filter parameters are discussed in more detail at RG 241.33–RG 241.47.

Crossing systems

RG 241.24 ‘Crossing systems’ are automated services provided by a market participant that match or execute client orders otherwise than on an order book of a licensed market, with orders of:

- (a) the participant;
- (b) other clients of the market participant; or
- (c) any other person whose orders may access the crossing system.

RG 241.25 Crossing systems are discussed further at RG 241.97–RG 241.97 and in *Regulatory Guide 223 Guidance on ASIC market integrity rules for competition in exchange markets* (RG 223). In this regulatory guide, guidance in relation to crossing systems apply only to market participants of the ASX and Chi-X markets.

Note: The ASIC Market Integrity Rules (APX) do not contain any requirements in relation to crossing systems.

Notifications to ASIC

When to contact ASIC

RG 241.26 To meet its obligations for each AOP system, a market participant must provide us with certifications and notifications: see Section D.

RG 241.27 These include:

- (a) initial review and certification (see RG 241.133–RG 241.155);
- (b) annual review and notification (see RG 241.169–RG 241.183); and

- (c) further certification (as required by ASIC) (see RG 241.184–RG 241.185).

Note: For the suggested form of these certifications and notifications, see Appendices 1 and 2 of this guide.

How to contact ASIC

- RG 241.28 The required certifications or notifications should be addressed to the Senior Executive Leader of Market and Participant Supervision, ASIC by email at market.participants@asic.gov.au.

Other relevant guidance

- RG 241.29 This guide should be read in conjunction with other regulatory guides on market integrity rules and other obligations for market operators and market participants: see Table 1.

Table 1: Related guidance

ASIC regulatory guide	What it covers
Regulatory Guide 172 <i>Australian market licences: Australian operators</i> (RG 172)	Our expectations for market operator systems and controls
Regulatory Guide 214 <i>Guidance on ASIC market integrity rules for ASX and ASX 24 markets</i> (RG 214)	Our rule-making regime and approach to supervising compliance with ASIC market integrity rules for ASX and ASX 24 (including our approach to waivers)
Regulatory Guide 216 <i>Markets Disciplinary Panel</i> (RG 216)	The disciplinary process for breaches of all ASIC market integrity rules (including market integrity rules for competition in exchange markets)
Regulatory Guide 223 <i>Guidance on ASIC market integrity rules for competition in exchange markets</i> (RG 223)	Guidance on ASIC market integrity rules for competition in exchange markets and crossing systems
Regulatory Guide 224 <i>Guidance on ASIC market integrity rules for Chi-X and APX markets</i> (RG 224)	Guidance on ASIC Market Integrity Rules (Chi-X) and (APX)
Regulatory Guide 225 <i>Markets Disciplinary Panel practices and procedures</i> (RG 225)	The operational framework for the Markets Disciplinary Panel when considering alleged breaches of ASIC market integrity rules
Regulatory Guide 226 <i>Guidance on ASIC market integrity rules for capital and related requirements: ASX, ASX 24, Chi-X and APX markets</i> (RG 226)	Guidance on ASIC market integrity rules for capital and related requirements: ASX, ASX 24, Chi-X and APX markets

B Requirements for AOP

Key points

A market participant that uses its system for AOP must:

- have appropriate automated filters for AOP, including processes for recording any changes to, and having direct control over, automated filters and filter parameters;
- have in place trading management arrangements, including arrangements to determine and log the origin and ownership of orders and trading messages, sufficient system capacity and adequate business continuity, backup and disaster recovery plans;
- have in place organisational and technical resources to ensure it can comply with its obligations for trading through AOP;
- have in place security arrangements to monitor and prevent unauthorised access to the system;
- meet other requirements for responsible use of AOP, including monitoring trading through AOP in real time or close to real time, exception and post-trade analysis, managing particular financial and trading risks, and having adequate resources to manage change;
- have and review policies and procedures for compliance with Part 5.6 and appropriate system design documentation;
- have appropriate arrangements for testing its AOP filters, filter parameters, controls and systems; and
- immediately comply with any direction from ASIC to cease, suspend, limit or prohibit AOP.

RG 241.30 AOP systems can improve the speed and efficiency with which a market participant routes and executes orders. However, the use of AOP systems can also result in increased risks to the efficiency and integrity of a market or a crossing system operated by a market participant, and financial, reputational and regulatory risks for the market participant.

RG 241.31 Part 5.6 of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) imposes obligations on market participants that seek to mitigate the risks posed by AOP systems, in particular the risks to the efficiency and integrity of the market or of a crossing system operated by a participant. The rules in Part 5.6 are specific to AOP systems, and build upon the general obligations in Part 5.5, which require a market participant to have organisational and technical resources and trading management arrangements in relation to the use of its trading infrastructure as a whole.

Note: Part 5.6 of the ASIC Market Integrity Rules (ASX) and (Chi-X) imposes obligations on a market participant that operates a crossing system. The ASIC Market Integrity Rules (APX) do not contain any requirements in relation to crossing systems.

- RG 241.32 This section covers requirements for AOP relating to:
- (a) automated filters;
 - (b) trading management arrangements;
 - (c) organisational and technical resources;
 - (d) security arrangements;
 - (e) responsible use of AOP;
 - (f) documentation;
 - (g) testing arrangements; and
 - (h) directions from ASIC to cease, suspend, limit or prohibit AOP.

Automated filters

RG 241.33 The requirement to have appropriate automated filters is fundamental to the obligations imposed on market participants under Part 5.6. Automated filters are referred to in:

- (a) Rule 5.6.1(a), which requires a market participant that uses its system for AOP to at all times have appropriate automated filters for AOP;
- (b) Rules 5.6.3(1)(a) and 5.6.3(1)(b), which require a market participant to have appropriate automated filters as part of its organisational and technical resources and trading management arrangements; and
- (c) Rule 5.6.3(2), which requires a market participant to have direct control over its automated filters and the filter parameters for those filters.

RG 241.34 Filters and filter parameters are pre-trade controls and the principal means by which trading messages are checked to ensure they will not interfere with the efficiency or integrity of the market or the proper functioning of any trading platform.

Note: For the definitions of 'filters' and 'filter parameters', see RG 241.21–RG 241.23.

RG 241.35 Filters establish points at which trading messages are tested and, by exception, action other than passing them directly into the market is taken. In practical terms, an automated filter can usually do one of four things in relation to any given trading message (depending on the settings of the filter parameters):

- (a) pass the trading message into the market;
- (b) pass the trading message into the market but identify it as an exception on exception reports generated by the system for subsequent analysis;
- (c) pass the trading message to a designated trade representative (DTR) for review and a decision as to whether the trading message may be submitted; or
- (d) reject the trading message outright.

- RG 241.36 We recognise that, given the differences in types of business conducted by market participants, there must be some degree of flexibility in determining what constitutes ‘appropriate’ filters for each market participant. The type of filters will depend on the market participant’s system capabilities, the nature, scale and complexity of its business and the particular risks that the market participant has assessed as relevant to that business (including financial, reputational and regulatory risks: see RG 241.81–RG 241.82).
- RG 241.37 Where a market participant provides ACOP access to clients, the market participant should have an adequate understanding of its clients’ business. The filters and controls for the client’s access should reflect the nature of the business.
- RG 241.38 Where a market participant operates a crossing system, Rule 5.6.1(b)(iii) requires a market participant to have in place appropriate filters in relation to AOP to ensure that orders entering the crossing system do not interfere with the efficiency and integrity of the crossing system.
- RG 241.39 We expect that for the purposes of Rules 5.5.2, 5.6.1 and 5.6.3(a), a market participant will have in place filters that minimise the opportunity for erroneous orders to be entered in the market, as such orders may interfere with the efficiency and integrity of the market or the proper functioning of a trading platform.
- RG 241.40 An ‘erroneous order’ may be described as an order that is submitted in error, or that contains an error in one of its attributes (e.g. the price or volume of the order does not reflect the price or volume at which the market participant or its client intended to trade).
- RG 241.41 In an AOP environment, an erroneous order may be caused by, for example:
- (a) a mistake in, or incorrect context used for, any parameter of instruction placed by an authorised person (e.g. entering the wrong price, or entering the volume into the price field), or a mistake in the handling of an instruction by an order management system;
 - (b) corruption of data when the order is transmitted to, or interpreted by, a system; or
 - (c) duplication, or loss, of a trading message.
- RG 241.42 Market operators of ASX and Chi-X must have in place controls for equity market products to filter anomalous orders and manage extreme price movements: see Chapter 2 of the ASIC Market Integrity Rules (Competition in Exchange Markets) 2011 and Section B of RG 223. These controls may complement the controls a market participant may have in place. However, a market participant cannot rely on a market operator’s controls to comply with its obligations under the ASIC Market Integrity Rules (ASX) and

(Chi-X) and ASIC Market Integrity Rules (Competition), including those outlined in this guide.

Note: In this document 'ASIC Market Integrity Rules (Competition)' refers to the ASIC Market Integrity Rules (Competition in Exchange Markets) 2011.

- RG 241.43 The ASIC Market Integrity Rules (Competition) do not apply to APX as APX is a listing market and does not offer trading services in ASX-listed equity market products.

Processes to record any changes to the filters or filter parameters

- RG 241.44 A market participant must have processes to record any changes to the filters or filter parameters: Rule 5.6.3(1)(a). We expect a market participant, in complying with this rule, to have an ongoing audit and review function that will capture and record any changes to the filters or filter parameters. This includes intra-day changes to the filter parameters and changes made by authorised persons: see Section C of this guide.
- RG 241.45 A market participant should be able to control, monitor and reconstruct (i.e. for information purposes) any changes to systems, filters or parameters within an AOP system. A market participant should be able to identify which filters are activated and which are not activated at any point in time. We expect a market participant to have in place procedures such that changes to filters and filter parameters at the 'administrator level' can be implemented only after they are authorised by a qualified person (e.g. a person with relevant experience in broking operations, operational management or compliance).
- RG 241.46 We expect a market participant to demonstrate in the documentation that accompanies its initial certification under Rule 5.6.6 (see Section D of this guide) that it has in place processes to record any changes to the filters or filter parameters. We would not accept that an AOP system complies with Rules 5.5.2 and 5.6.3 where there are poor processes and internal controls over changes to filters, filter parameters and exception reports, or where filters, filter parameters and exception reports could be deactivated.
- RG 241.47 Any material changes to the filters will also be subject to a review of material changes in accordance with Rule 5.6.8: see Section D.

Direct control over automated filters and filter parameters

- RG 241.48 A market participant that uses its system for AOP must at all times have direct control over its automated filters and the filter parameters: Rule 5.6.3(2).
- RG 241.49 We expect a market participant to have direct control over the application of the filters and filter parameters at the 'administrator' level. This means that a market participant must have direct control over whether the filter is activated or deactivated in the AOP system, and over any changes to the filter parameters.

However, a market participant may allow a person some discretion to change the filter parameters at the ‘user’ level, within a defined range.

- RG 241.50 Where the market participant relies on filters that are outside its AOP system (e.g. where the filter sits between the market operator and market participant or with an independent third party provider, or within another AOP system belonging to the market participant), the market participant must ensure that the activation or deactivation of the filter, and changes to the filter parameters, are only made with the authorisation of a qualified person of the market participant (e.g. a person with relevant experience in broking operations, operational management or compliance).
- RG 241.51 An example of where we would not consider that a market participant has direct control over filters and changes to filter parameters is where there is no ‘administrator level’ control or where changes at this level are made by the client (or, if the client’s order management system is operated by a related party of the client, by that related party) and merely copied over to the market participant for authorisation or information purposes.
- RG 241.52 Access arrangements where an authorised person deals directly on a market through a market participant but independent of the market participant’s controls, such as a sponsored access arrangement, are not permitted under Rule 5.6.3 (when read in conjunction with Rule 5.5.1).

Controls for suspending, limiting or prohibiting AOP

- RG 241.53 A market participant which uses its system for AOP must ensure that the system has in place controls, including automated controls, that enable immediate suspension, limitation or prohibition of the conduct of all AOP, AOP in respect of ACOP, or AOP in respect of one or more authorised persons, clients or financial products: Rule 5.6.3(1)(d).
- RG 241.54 We would expect a market participant to rely on these automated controls to suspend, limit or prohibit AOP when the market participant has identified, for example, that trading messages from a particular source (e.g. a particular authorised person, account or algorithm) are interfering with the efficiency or integrity of the market or do not comply with the AOP requirements.
- RG 241.55 The automated controls required by Rule 5.6.3(1)(d) may include:
- (a) termination of an AOP system (referred to as a ‘kill switch’);
 - (b) shutdown of a responsible AOP subsystem;
 - (c) forced logout of an authorised person; or
 - (d) a control implemented by amending the parameters of a particular filter to zero or a level that would prevent further trading.

Controls for suspending, limiting or cancelling trading messages

- RG 241.56 A market participant that uses its system for AOP must also ensure the system has in place controls that enable immediate:
- (a) suspension, limitation, or prohibition of the entry of trading messages into a market and orders into a crossing system where the market participant has identified that the trading messages or orders in the series have entered the market or crossing system and have interfered with, or are likely to interfere with, the efficiency or integrity of the market or crossing system (Rules 5.6.3(e)(i) and 5.6.3(e)(iii)); and
 - (b) cancellation of trading messages in a series that have already entered the market and cancellation of orders in a series that have already entered a crossing system, where the entry of further trading messages or orders in the series have been suspended, limited or prohibited under Rules 5.6.3(e)(i) or 5.6.3(e)(iii) (Rules 5.6.3(e)(ii) and 5.6.3(e)(iv)).
- RG 241.57 For the purposes of Rule 5.6.3, trading messages and orders may be part of a series where they are generated by a common user, account or algorithm and occur in close succession.
- RG 241.58 We understand it may be difficult for a market participant to test the affect trading messages and orders, or a series of trading messages and orders, may have on the market or crossing system before they are submitted to the market or crossing system. For example, trading messages, orders, or a series of trading messages or orders, may not necessarily affect the last traded price of a product, but may affect the depth of the order book in that product and give rise to a false and misleading appearance of active trading in the product.
- RG 241.59 A market participant must have in place controls so that once it has identified, through its monitoring arrangements (see RG 241.74–RG 241.80), a series of trading messages that are having or are likely to have an impact on a market, or a series of orders that are having or are likely to have an impact on a crossing system, it can suspend (i.e. isolate for review), limit or prohibit further entry of the orders or trading messages and cancel any that have already entered the market or crossing system.

Trading management arrangements

- RG 241.60 Under Rule 5.5.3, a market participant must have in place arrangements so that at all times the market participant can determine the origin of all orders and trading messages, including:
- (a) the different stages of processing each order (regardless of whether a trading message is generated) and the time at which each stage of processing occurred;
 - (b) the order that corresponds to a trading message;

- (c) the identity and capacity of the person placing the order (e.g. whether acting as agent or principal);
- (d) whether the trading message was the result of AOP;
- (e) the open interface device (i.e. the electronic protocol and message structure used to access the trading platform) and computer (or other device of the market participant connected to an open interface device of the market participant) through which the trading message was submitted;
- (f) the DTR with responsibility for the open interface device or computer or other device connected to the open interface device (unless the trading message was the result of AOP); and
- (g) whether the trading message was submitted on the market participant's own account or for a client.

RG 241.61 A market participant must maintain records of the matters referred to in Rule 5.5.3 for a period of seven years from the date of the trading message to which the matters relate: Rule 5.5.4.

RG 241.62 Under Rule 5.6.3(1)(b), a market participant that uses its system for AOP must ensure that the system has trading management arrangements, including appropriate automated filters, filter parameters and processes to record any changes to the filters or filter parameters to enable the ready determination of the origin of all orders and trading messages. We consider this to mean that all AOP systems must have the capacity to capture the information required by Rule 5.5.3.

Capacity

RG 241.63 As part of its trading management arrangements, a market participant should have sufficient AOP system capacity to accommodate reasonably foreseeable volumes of trading activity. We expect a market participant to have in place arrangements to prevent capacity limits on messaging from being breached.

RG 241.64 Market participants should keep capacity requirements under review and conduct capacity stress tests regularly. A market participant's systems should be scalable to allow for changes in response to elevated message levels and/or stressed market conditions that might breach their capacity.

Business continuity

RG 241.65 As part of its trading management arrangements, a market participant should have adequate business continuity, backup and disaster recovery plans for each of its systems that support order entry, order routing, execution and trade reporting. These plans should reflect the nature, scale and complexity of the market participant's businesses, including ensuring there is sufficient

system capacity. For example, a market participant with a smaller, less complex business may rely on another market participant or the market operator to provide aspects of its business continuity, backup and disaster recovery arrangements. Other market participants, such as those with substantial client commitments or market makers that are subject to minimum quoting requirements, will be likely to require arrangements that are tailored for their business.

- RG 241.66 Market participants should have adequate arrangements to ensure timely access to skilled and knowledgeable internal and vendor technical support for their specific AOP system configurations, particularly while implementing AOP system changes.

Logging information

- RG 241.67 We expect a market participant to have trading management arrangements to ensure that its AOP systems logs information about the interaction of orders and trading messages with any connected system or market operator system, to ensure that the origin and ownership of the order can be traced.
- RG 241.68 When considering the origin of each order, a market participant should have in place trading management arrangements to define the origin of an order—for example, the source of the instructions to place the order and the ‘owner’ during each stage of the process before a message reaches the trading platform (i.e. the person or system responsible for the order).
- RG 241.69 Where additional systems such as smart order routers, algorithmic programs and internalised crossing engines are involved in processing trading messages, a market participant may choose to pass message ownership to each system processing stage without changing the origin of the initial placement of the order.

Organisational and technical resources

- RG 241.70 For the purposes of complying with Rule 5.5.2(b), a market participant should have in place organisational and technical resources to ensure it can comply with its obligations for trading through AOP as set out below:
- (a) *Trading record requirements:* We expect a market participant to have in place organisational and technical resources to automatically generate and maintain all trading records from the AOP system that are required to be kept specifically under Parts 4.1 and 4.2, and generally under the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) and the ASIC Market Integrity Rules (Competition) and the Corporations Act, regardless of whether the order enters the trading platform or is rejected by the market participant’s AOP filter.

- (b) *Capital requirements:* We expect a market participant (other than a market participant that is a clearing participant or trades as principal only) to have in place organisational and technical resources to ensure that when it trades on its own behalf or on behalf of clients through AOP, it complies at all times with the risk-based capital requirements set out in Schedule 1A or the net tangible assets (NTA) requirements set out in Schedule 1B of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX), as applicable: Rule 8.2.1.
- (c) *Best execution obligations:* We expect a market participant to have in place organisational and technical resources to ensure that when it trades for clients through its AOP system, it complies with its best execution obligations and best execution policies and procedures: Chapter 3 (Competition).
- (d) *Client order priority requirements:* We expect a market participant to have in place organisational and technical resources to ensure that it complies with its obligations to deal fairly and in due turn with clients' orders, and a client order on its own account (Rule 5.1.3), and that its AOP system can effectively manage both on a pre-trade and post-trade basis transactions where principal orders or orders from the same client on opposing sides of the market match (such that there is no change in beneficial ownership): Rule 5.7.2(h).

Security arrangements

RG 241.71 Under Rule 5.6.3(1)(c), a market participant's AOP system must have in place security arrangements to monitor and prevent unauthorised access to a gateway or an open interface device, or to a computer or other device connected to an open interface device, and to ensure that the system does not interfere with the efficiency and integrity of the market or the proper functioning of the trading platform. A market participant should consider assessing its security arrangements against security standards such as AUS/NZS 4444 *Information security management* and ISO/IEC 17799 *Information technology: Security techniques—Code of practice for information security management* or equivalent.

RG 241.72 A market participant that accepts orders should have in place adequate physical and electronic security arrangements and seek to adopt and enforce written procedures to ensure reliability and uphold the confidentiality of orders and client account information. Such procedures would seek to at least address the following matters:

- (a) authentication and authorisation of users, so that the operating system and application security limit internal access to authorised personnel;
- (b) encryption of information;

- (c) firewalling, to prevent unauthorised external access;
- (d) periodic testing of the market participant's security management; and
- (e) administration and ownership of system management.

Responsible use of AOP

RG 241.73 We consider that, to comply with Rules 5.5.2, 5.6.1 and 5.6.3 and to ensure responsible use of AOP, a market participant must ensure that it has in place monitoring and control arrangements, arrangements for managing the particular financial and trading risks that are relevant to the business it conducts through AOP, and resources for managing change: see RG 241.74–RG 241.101.

Monitoring and control: Real-time or close to real-time

RG 241.74 We expect a market participant to be able to monitor in real-time, or close to real-time, all trading messages submitted to a market. In some cases, a combination of filters and oversight by a DTR may be sufficient for this purpose. However, when the volume of orders, order-to-trade ratios, number of client accounts or speed or complexity of messaging exceeds, or may be expected to exceed, levels where manual oversight is no longer effective, a market participant should consider automated methods for monitoring.

Note: A market participant that operates a crossing system should refer to guidance in RG 223 on monitoring arrangements for orders in a crossing system.

RG 241.75 Any surveillance (whether manual or automated) should be capable of identifying potential or actual breaches of market integrity rules in real or close to real time. Where the market participant identifies activity that has interfered with or is likely to interfere with the efficiency and integrity of the market, it must take steps to address the issue without delay. Where appropriate, this includes the use of controls that enable immediate suspension, limitation or prohibition of trading messages or of the conduct of all AOP, AOP for ACOP, or AOP for one or more authorised persons, clients or financial products: see RG 241.53–RG 241.56.

RG 241.76 A market participant may consider monitoring the following when using an AOP system:

- (a) the nature and liquidity demands of the AOP system to avoid unusual movements in market price or increased volatility;
- (b) the level of use of the AOP system to avoid generation of large numbers of the following types of orders, which may result in an adverse impact on a market:
 - (i) concurrent orders;
 - (ii) orders of small executable quantity (e.g. under an elected dollar-based or other nominal value); or

- (iii) trading strategies that involve amending and/or cancelling a large number of orders that result in either a disproportionately low number of transactions or no transactions;
- (c) whether the AOP system appears to react to order book changes outside of the best market; and
- (d) the effectiveness of the ‘Chinese walls’ required to manage the involvement of those staff operating in a compliance or information technology (IT) oversight role that have access to information on the nature of the AOP system and to client order flow.

Monitoring and control: Exception and post-trade analysis

RG 241.77 We consider that a market participant must have both the capability and appropriately qualified personnel to regularly analyse historic order and trading patterns to:

- (a) identify trading activity that may warrant review by the market participant’s compliance area; and
- (b) adjust the relevant automated filters and filter parameters where it is apparent that they are not operating as intended.

RG 241.78 Where a trading message (or series of trading messages) that has been rejected by a filter is passed to a DTR for review, the DTR will need to make a decision whether to amend, cancel or pass the trading message (or series of trading messages) into the market.

RG 241.79 Where a trading message has been passed to a DTR for review, a market participant must ensure records of the DTR’s action comply with Parts 4.1 and 4.2 and Rule 5.5.3(f).

RG 241.80 Where, in real-time monitoring, a DTR decides to pass a trading message into the market but places the trading message on an exception report for ongoing monitoring, a compliance officer or other qualified person must be available for the DTR to consult. Market participants should ensure exception reports are monitored on a regular basis and at least daily.

Financial and trading risks

RG 241.81 In complying with Rules 5.5.2, 5.6.1 and 5.6.3 and ensuring responsible use of AOP, a market participant should take into account financial and trading risks in addition to the regulatory risks and market integrity risks already described.

RG 241.82 We consider the factors that will be relevant in assessing the level of financial and trading risk include, but are not be limited to:

- (a) the proposed nature of the business passing through the AOP;
- (b) whether the AOP will permit ACOP;

- (c) where the system does permit ACOP, whether the market participant intends to allow authorised persons to delegate their ACOP access;
- (d) whether the AOP will allow algorithmic trading (see RG 241.91–RG 241.95);
- (e) whether the AOP uses a third-party system and whether it is provided to the market participant by a related party of the authorised person conducting business through the AOP;
- (f) whether there will be a high message or trade ratio flow through the AOP;
- (g) whether the AOP relies on latency-dependant connections and interfaces such as co-located business; and
- (h) whether the AOP interacts with a crossing system operated by the market participant.

Order-to-trade ratios

- RG 241.83 An order-to-trade ratio is a measure of the number of times orders submitted into an order book are amended or cancelled relative to the execution of a trade.
- RG 241.84 A market participant that uses either a system to manually enter orders and instructions from an authorised person, or a highly sophisticated order management system that automatically generates instructions with little to no human intervention, will need to monitor order-to-trade ratios.
- RG 241.85 In particular, a market participant will need to monitor order-to-trade ratios that may signal:
- (a) a dysfunctional AOP system or a poorly programmed algorithm that may either create or contribute to a disorderly market; or
 - (b) order behaviour that may indicate abusive behaviour or market misconduct.
- RG 241.86 When monitoring order-to-trade ratios a market participant will need to consider the following factors, which may indicate the matters set out in paragraphs RG 241.85(a)–RG 241.85(b):
- (a) whether the value of the transaction(s) relative to the number of orders entered is materially different. For example, 1,000 orders entered into a market that generate trades amounting to a nominal value may indicate market misconduct;
 - (b) whether the order-to-trade ratio is excessive relative to current market liquidity. For example, a large number of trading messages or orders relative to transactions in illiquid securities, or a large number of trading messages or orders (including amendments) in liquid securities away from the current market price may be indicative of either a dysfunctional algorithm or market misconduct;

- (c) whether the order-to-trade ratio is high in a volatile market and the volatility in the market is not driven by an event or explanation. For example, where an explicable market event is causing volatility, a relatively higher order-to-trade ratio may be appropriate;
- (d) the impact of the order-to-trade ratio on the price of a security;
- (e) the execution goals of the algorithm; and
- (f) compliance with order-to-trade ratio requirements under the market operator rules or guidance.

RG 241.87 For business models that use more sophisticated order management systems and that generate instructions with little or no human intervention or generate subordinated orders from a larger parent order through an AOP or ACOP system, a market participant will need to consider whether the order-to-trade ratio reflects the execution goals of the algorithm while preventing a disorderly market and ensuring it does not amount to abusive behaviour or market misconduct. Measurement metrics may include, but are not restricted to:

- (a) the number of subordinated orders and trades over a specific timeframe relative to the execution goal and the parent order instruction; and
- (b) whether the order-to-trade ratio is excessive, at a more granular level, when measured relative to typical market liquidity and volatility levels of the financial product.

ACOP

RG 241.88 Where a market participant's AOP system permits ACOP, the market participant will need to manage the financial risks associated with ACOP.

RG 241.89 Market participants should adopt and enforce written procedures reasonably designed to prevent clients and other authorised persons from entering into trades that create undue financial risk for the clearing participant (whether the clearing participant is the market participant or a third party).

RG 241.90 The procedures should address both pre-execution and post-execution controls to minimise financial risk. This includes considerations that should be taken into account before authorising the use of ACOP, the process for determining which controls to apply to a particular authorised person, and ongoing review of all controls imposed. In particular, the controls should ensure each authorised person has sufficient financial resources for their trading.

Algorithmic programs

RG 241.91 Market participants that allow or conduct algorithmic programs will need to have in place arrangements to manage the risk associated with trading using algorithmic programs. Trading using algorithmic programs is a major source of trading messages.

Note: For a definition of 'algorithmic programs', see RG 241.19–RG 241.20.

- RG 241.92 Algorithmic programs may be used by the market participant, a client or by an authorised person. Like all trading messages, trading messages generated by the algorithmic program must pass through the market participant's filters and are deemed to have been submitted with the knowledge of the market participant: Rules 2.5.1 and 2.5.4.
- RG 241.93 We consider that a market participant should also seek to have an agreement or arrangement with an authorised person who uses their own algorithmic trading models that systems flow should be tested against market participant AOP filters before use (i.e. at the development stage) and to the extent possible before implementing material changes.
- RG 241.94 Market participants should take into account any differences between the speed with which their AOP system can generate messages and the speed with which the market operator's system can process those messages.
- RG 241.95 Where poor AOP controls lead to continuing patterns of order deletions, order amendments, high order-to-trade ratios relative to the underlying security, over trading or wash trading, we may consider giving a direction under Rule 5.6.12 to cease, suspend, limit or prohibit AOP: see RG 241.114–RG 241.118.

Trading on multiple markets and multi-product AOP system routing

- RG 241.96 We consider responsible use of AOP requires market participants to manage the risk associated with trading on multiple markets and in multiple product types, to accommodate the differing platform specifications and financial products and order types and to consider the impact that a disruption caused by an AOP order on one market may have on another market (i.e. to ensure that the market participant does not interfere with the conduct of an orderly market and does not assist or facilitate manipulative trading).

Crossing systems

- RG 241.97 We consider the responsible use of AOP requires a market participant that operates a crossing system to manage the risks associated with AOP interacting with its crossing system. For example, the market participant should have alternative arrangements for managing client orders, including bypassing the crossing system and routing client orders to a licensed market, in the event of a disruption.

Corporate actions

- RG 241.98 We consider that responsible use of AOP includes arrangements to manage the risk associated with trading during corporate actions.
- RG 241.99 When operating in a multiple market environment, a market participant will need to ensure that it can manage or alert the authorised person for stock reconstructions, order book purges and corporate actions, taking into account any different treatment of those corporate actions by each market operator.

Resources to manage change

- RG 241.100 We expect a market participant to have resources to manage change, and to demonstrate that change management. This requires appropriately authorised (e.g. at an IT oversight or change manager level), well-documented and clearly auditable processes reflecting systems upgrades, changes and implementations.
- RG 241.101 Change management procedures may include procedures that ensure:
- (a) changes are adequately tested before implementation (see also RG 241.106–RG 241.113);
 - (b) only authorised changes to software, hardware and systems can be implemented; and
 - (c) new software, hardware and systems can only be implemented into the production environment after authorisation by an appropriately senior, qualified person.

Documentation

- RG 241.102 A market participant must have, and review, policy documents relating to the use of AOP: Rules 5.6.4, 5.6.8(1) and 5.6.8A(1). We consider these policy documents should address use of AOP in light of the business requirements of the market participant and the type of activity envisaged for the AOP system(s).
- RG 241.103 We expect that a market participant's policies and procedures for compliance with Part 5.6 and system design documentation should be tailored to the nature, scale and complexity of the market participant's business and the type of activity envisaged for the AOP system, and must be accurate, complete and up-to-date. These policies, procedures and system design documentation form the basis for initial certification and annual notification of the market participant's AOP system(s): see Section D of this guide.

Policies and procedures

- RG 241.104 A market participant's policies and procedures for compliance with Part 5.6 should cover at least the following matters:
- (a) monitoring and reviewing all aspects of AOP and the AOP parameter specifications;
 - (b) evaluating the manner in which AOP and its components will operate under various market scenarios;
 - (c) ensuring that before effecting a particular algorithm, changes in market conditions are assessed to ensure compliance;
 - (d) setting (and adjusting where necessary) system monitoring parameters (alerts) designed to detect potential manipulative, disruptive or other unusual activity (e.g. improper short selling);
 - (e) generation of ad hoc and exception reports (i.e. reports that identify where an underlying policy, procedure, or system requirement has not been met) for review by designated staff (e.g. management and compliance) with procedures to ensure that where necessary there is follow-up action;
 - (f) involvement of appropriate staff (e.g. management, risk, compliance and internal audit) in the development of an algorithm before it is made available for use;
 - (g) training and education of staff in relation to AOP; and
 - (h) system certification requirements.

System design

- RG 241.105 A market participant's system design documentation should cover at least the following matters:
- (a) system and sub-system architecture (hardware and software) including communication architecture, detailed design, processing logic, files and database designs, system security/integrity controls;
 - (b) the flow of trading messages including the origin of all orders and trading messages;
 - (c) targeted execution venues;
 - (d) filter arrangements;
 - (e) output layouts including reports, logs, screen based field/data layouts, query results;
 - (f) operator input layouts (e.g. data entry screens, optical character readers, scanners, input record types file structures); and
 - (g) external interfaces including data format requirements, specifications, and directional diagrammatic representation of connectivity between systems.

Testing

- RG 241.106 A market participant must have automated filters and filter parameters to enable trading messages to be submitted into the trading platform without interfering with the efficiency and integrity of the market or the proper functioning of the trading platform: Rule 5.6.3(1)(a).
- RG 241.107 To comply with this rule, a market participant should have appropriate arrangements for testing its AOP filters, filter parameters, controls and systems:
- (a) before using an AOP system for the first time, to provide representations under Rule 5.6.5 that the market participant has in place organisational and technical resources, arrangements and controls in relation to the AOP that meet the requirements of Rule 5.6.3 (for the purposes of initial certification as outlined in Section D of this guide);
 - (b) when there is a material change to an AOP system; and
 - (c) on an ongoing basis, to ensure the market participant continues to meet the requirements of Rule 5.6.3.
- RG 241.108 Market participants should have appropriate testing arrangements to ensure that their AOP systems are functional and reliable, and do not pose a threat to the efficiency and integrity of the market or any crossing system it operates. Non-production testing is a crucial part of ensuring that the AOP system functions as intended. The nature and extent of the testing arrangements a market participant puts in place will depend on the type of business the market participant intends to conduct through its AOP system.
- RG 241.109 The testing methodologies should be designed to ensure that:
- (a) filters, filter parameters and controls work as intended;
 - (b) the AOP system can continue to work effectively in stressed market conditions; and
 - (c) testing results are quantifiable and display definitive qualitative outcomes.
- RG 241.110 When undertaking AOP testing, a market participant should have a documented test strategy, confirming the intended scope of the testing, test plans, test cases, test results, defect resolution and final test results. This information may be requested by ASIC to confirm the scope of testing for an AOP system. Testing methodology should seek to include evidence of an ongoing process for management of changes to the AOP system over time, including material changes: see Section D of this guide.
- RG 241.111 AOP testing may include, but not be limited to, the following types of testing:
- (a) *Unit testing*: This involves testing code fragments or modules in isolation.
 - (b) *Conformance testing*: This involves testing system conformance with the targeted operator, execution venue, and order book.

- (c) *Functional testing*: This involves confirming that the AOP system and filters function as intended for the proposed business.
- (d) *Regression testing*: This involves running previous tests to confirm that further changes have not introduced new bugs.
- (e) *Stress testing*: This involves testing both AOP logic and filters under extreme circumstances and market conditions and consideration of the system's scalability, capacity, stability and performance (see also RG 241.63–RG 241.64).
- (f) *System testing*: This involves testing both AOP logic and filters when used in conjunction with other systems.
- (g) *Acceptance testing*: This involves validation by end users before use within the production environment.

Testing in non-production environments

- RG 241.112 In testing its AOP system, a market participant should use a non-production test environment to stress test algorithmic programs and order flow. A market participant should consider stress testing filters under conditions which simulate production use (e.g. a low-latency, high message volume, volatile environment).
- RG 241.113 We recognise that the situations in which an AOP will function may be difficult to reproduce within an operator development, or a client or market participant sandbox, environment. However, a market participant is expected to take steps that reflect the size, scope and nature of the AOP systems business function to test for these situations, commensurate with the degree of risk to market integrity and efficiency, before using an AOP within the market.

ASIC direction to cease, suspend, limit or prohibit AOP

- RG 241.114 Under Rule 5.6.12, ASIC may give a direction to a market participant to:
- (a) cease conducting AOP until we are satisfied that the market participant complies with the AOP requirements; or
 - (b) immediately suspend, limit or prohibit AOP, where we reasonably consider the market participant is not complying with the requirements in Part 5.6, or it is otherwise appropriate to give a direction.
- RG 241.115 We will provide directions under Rule 5.6.12 in writing. However, there may be circumstances where we need to provide a direction quickly. In these circumstances, we will advise the market participant verbally (either by telephone or in person) that we intend to provide the direction and follow up with a written direction.

- RG 241.116 Market participants should ensure that their management plans, including the contact details for their responsible executives and representatives elected to comply with Rule 5.9.2, remain current and up-to-date for this purpose.
- RG 241.117 We expect a market participant that is advised that we intend to provide a written direction under Rule 5.6.12 to consider taking immediate action to cease, suspend, limit or prohibit AOP before receiving the written direction.
- RG 241.118 A market participant that receives a direction from ASIC must immediately comply with the direction.

C Access by authorised persons

Key points

A market participant must meet certain obligations before giving access to its system for AOP to a client or a client's agent, or to a representative of the market participant, as an authorised person.

Before giving this access, a market participant must ensure it is satisfied that the client, client's agent or representative has adequate skills and knowledge. How a market participant chooses to satisfy itself of an authorised person's competency may vary depending on both the nature and scope of the access being given.

Some of the ways a market participant may consider satisfying itself about authorised persons include:

- policies and procedures for demonstrated knowledge;
- policies and procedures for supervision of authorised persons; and
- written agreements between the market participant and authorised persons.

Authorised persons

RG 241.119 This section gives guidance on our expectations of a market participant where it permits authorised persons to submit orders into its AOP system.

RG 241.120 For the purposes of this guide, an authorised person is a person who:

- (a) is either:
 - (i) a client of a trading participant;
 - (ii) an agent of a client of a trading participant; or
 - (iii) a representative of a trading participant; and
- (b) is permitted by a trading participant to submit orders into the trading participant's system: Rule 1.4.3.

RG 241.121 A market participant that uses its system for ACOP must have in place procedures to ensure that each authorised person—that is, a client or a client's agent, or a representative of a market participant—has demonstrated to the market participant knowledge of the market participant's order entry system and the dealing rules, directions, decisions and requirements of the market operator that are relevant to the type of order submission facilities given to the authorised person by the market participant: Rule 5.6.2.

Note: For a definition of 'ACOP', see RG 241.15–RG 241.18.

- RG 241.122 ‘Dealing rules’ are the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) and the operating rules of the ASX, Chi-X and APX markets that govern the submission of orders and the execution and reporting of market transactions on a trading platform: Rule 1.4.3.
- RG 241.123 Where a representative of a market participant that is authorised as a DTR acts in the capacity of an authorised person (see RG 241.13–RG 241.14), the market participant must ensure that the representative meets the requirements of Rule 5.6.2. We would expect in many cases that a representative who meets the criteria in Rule 2.5.5 will have demonstrated knowledge that satisfies the requirements of Rule 5.6.2.

Policies and procedures

Demonstrated knowledge

- RG 241.124 The requirement in Rule 5.6.2 relating to authorised persons is intended to ensure that a market participant has considered, and is satisfied with, the market-related knowledge of each person allowed access to its system for ACOP.
- RG 241.125 A market participant that uses its system for AOP should ensure that each authorised person (including relevant representatives of the market participant) understands all relevant aspects and limitations of its AOP system whether trading directly with or connecting to the AOP system.
- RG 241.126 The manner in which each market participant chooses to ensure authorised persons have demonstrated knowledge may vary depending upon the nature and scope of access granted to each authorised person and the financial products in which the authorised person can trade. For example, the requirements for an unsophisticated retail investor who can only enter, amend and delete orders using the AOP system provided by the market participant will be different from the requirements for an institutional client who can conduct more complex strategies (either provided by the market participant or facilitated through the market participant’s AOP system), or for an authorised person who intends to sub-delegate its market access to a third party.

Supervision

- RG 241.127 A market participant should have written supervisory policies and procedures for the supervision of authorised persons that:
- (a) primarily document the supervisory system that will ensure compliance with the laws and rules set out in a market participant’s compliance procedures;

- (b) are distinct from compliance procedures;
- (c) contain escalation procedures inclusive of whether compliance, senior management, regulator notification and assessment is required;
- (d) are periodically reviewed and amended where required; and
- (e) are available to all relevant persons, including authorised persons and relevant representatives.

Agreements between market participants and authorised persons

- RG 241.128 We encourage market participants to enter into agreements with their authorised persons. This is particularly important in circumstances where an authorised person is acting on behalf of another client (agency) or permits delegation of its access to a client of the authorised person. The purpose of a written agreement between the market participant and the client is to ensure that there is common understanding of the role and responsibilities for both parties conducting business through AOP.
- RG 241.129 We note that Rule 4.1.9 requires a market participant to maintain records relating to authorised persons for seven years. We expect agreements between market participants and authorised persons to be retained for the same period as they represent a critical aspect of the audit trail for the operation of ACOP.
- RG 241.130 Further, in meeting the obligations of Rule 5.6.3(1)(c), we expect a market participant to retain records of the security arrangements for access by an authorised person to the market participant's systems. Where the location of a particular computer or other device of an authorised person may change, the market participant should have in place effective policies, procedures and systems which can continuously identify all such devices.

D Review and certification of documentation and systems

Key points

A market participant must review and certify its documentation and system for AOP. This includes the following reviews and certifications or notifications:

- initial review and certification to ASIC before use of its system for AOP;
- review of any material changes to its AOP system before the changes are implemented; and
- annual review of its AOP system (where there has been no material change review in 12 months) and annual notification to ASIC.

A market participant may also need to provide further certification to ASIC if required.

- RG 241.131 Under Part 5.6 of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX), a market participant must undertake an initial review and certification of the system it uses for AOP and provide subsequent annual notifications about that system to ASIC. The purpose of these certifications and notifications is to provide additional assurance that the market participant knows and understands the nature of the business it conducts (or intends to conduct) through the AOP system and that compliance issues have been accordingly addressed.
- RG 241.132 A market operator may, under its operating rules or procedures or as part of an access agreement, also impose additional or different qualification or certification requirements that a market participant must meet before it will be permitted to connect to a trading platform. Satisfying a market operator's requirements does not mean the market participant has satisfied the requirements of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX).

Initial review and certification

Initial review

- RG 241.133 Before using its system for AOP, a market participant must review its policies, procedures, system design documentation (including procedures for implementing subsequent changes to the AOP software), filters and filter parameters, and other relevant documentation concerning its compliance with Part 5.6: Rule 5.6.4.
- RG 241.134 The purpose of this review is so that the market participant can provide the initial certification under Rule 5.6.6 (see RG 241.140–RG 241.143), in which it must confirm that nothing has come to its attention during the course of the review that would indicate that it is unable to comply with Part 5.6.

Representations

- RG 241.135 Before using an AOP system for the first time, a market participant must obtain written representations that the market participant has in place organisational and technical resources, arrangements and controls in relation to the AOP system that meet the requirements of Rule 5.6.3: Rule 5.6.5.
- RG 241.136 The purpose of obtaining the representations in Rule 5.6.5 is so that the market participant can provide the initial certification under Rule 5.6.6, which must include copies of the representations and confirmation by the market participant that its AOP system meets the requirements of Rule 5.6.3.
- RG 241.137 The written representations referred to in Rule 5.6.5(1) must:
- (a) be provided by persons who are suitably qualified and experienced in the systems and controls for which they are making the representations (see RG 241.186–RG 241.190);
 - (b) include the name of the person making the representation;
 - (c) be signed and dated by the person making the representation; and
 - (d) set out the methodology used by the person to enable them to make the representation: Rules 5.6.5(2) and (3).
- RG 241.138 We expect the methodology set out in the representation to include details of:
- (a) the process the person used to review the market participant's policies, procedures, system design documentation and other documents;
 - (b) the security arrangements for the AOP system, including but not limited to the matters set out in RG 241.71–RG 241.72; and
 - (c) the testing arrangements for the AOP system, including the matters set out in RG 241.106–RG 241.113.
- RG 241.139 When supplying to ASIC detail of methodology used in making the representations, supporting documentation should be provided. The supporting documentation should reflect the nature, scale and complexity of the market participant's business.

Initial certification

- RG 241.140 Before using a system for AOP, a market participant must provide to ASIC a written certification signed by at least two of its directors, and receive a written confirmation from ASIC that the certification complies with Rule 5.6.6(2): Rule 5.6.6(1). The written certification must include:
- (a) the market participant's name;
 - (b) the name and version number of the AOP system;
 - (c) copies of the representations required by Rule 5.6.5 (see RG 241.137–RG 241.139);

- (d) a confirmation by the market participant that:
 - (i) it has reviewed its documentation as required by Rule 5.6.4 (see RG 241.133–RG 241.134) and that nothing has come to its attention during the course of that review which would indicate that it is unable to comply with Part 5.6;
 - (ii) based on the review and the representations required by Rules 5.6.4 and 5.6.5, the AOP system either does or does not permit ACOP and meets the requirements of Rule 5.6.3; and
 - (iii) the representations have been made by persons whom the market participant considers to be suitably qualified and experienced in the controls and systems for which they are making the representations; and
- (e) the names of the two directors who signed the certification.

RG 241.141 All certifications must meet these minimum requirements. We encourage market participants to provide the certification in the form set out in Appendix 1 of this guide.

RG 241.142 We will not accept a qualified certification. For example, we will not accept certification that is premised on caveats that may undermine the integrity of the certification.

RG 241.143 The fact that an AOP system has been certified does not absolve the market participant of any of its underlying obligations under the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX), including the requirements in Section B of this guide.

Use of third-party systems

RG 241.144 We recognise that some AOP systems are developed internally by a market participant and others are developed externally by a third party. A market participant must ensure that it provides a certification for any third-party systems it uses unless orders coming through the system are subsequently processed by a certified AOP system of the market participant.

RG 241.145 Further, the fact that one market participant has certified an AOP system provided by a third party does not imply that another market participant using that third-party provider's system is not required to certify that system. For AOP systems developed by a third party, we will accept as supporting documentation for the initial certification, parts of the technical certification documentation supplied by that third party, provided the market participant can demonstrate that it has successfully reviewed the AOP system as required by Rule 5.6.4 and is making the representations required by Rule 5.6.5, including evidence of completed user acceptance testing of system integration with internal systems.

Connecting to new market operators

- RG 241.146 Under Rule 5.6.6, market participants are required to certify their AOP systems when they connect to a market, and receive a written confirmation from ASIC that the certification complies with the requirements of Rule 5.6.6(2): Rule 5.6.6(1).
- RG 241.147 Before May 2014, Rule 5.6.6A (Chi-X) permitted an ASX market participant that had already certified its AOP system for use on ASX under Rule 5.6.6 (ASX) to treat a proposed connection of that system to Chi-X as a material change, rather than having to undertake an initial certification of the system for use on Chi-X under Rule 5.6.6 (Chi-X). The same also applies to an ASX or Chi-X market participant proposing to use its AOP system (already certified for use on ASX or Chi-X) to connect to APX: see Rule 5.6.6A (APX).
- RG 241.148 From May 2014, Rule 5.6.6A (Chi-X) and (APX) will be removed. From that date, any market participants that have an AOP system that is certified under Rule 5.6.6 (ASX) (or the pre-existing ASX Market Rules) or Rule 5.6.6 (Chi-X) and that wish to make a new connection of that system to Chi-X or APX will need to undertake an initial certification of the system for use on Chi-X or APX under Rule 5.6.6 (Chi-X) and (APX). Market participants that have previously relied on Rule 5.6.6A (Chi-X) and (APX) for an existing connection will not need to take any action as a result of the removal of this rule: Rules 5.6.4(2), 5.6.5(3) and 5.6.6(4) (Chi-X) and (APX).
- RG 241.149 As has always been the case, Chi-X or APX market participants that have certified an AOP system for use on Chi-X or APX under Rule 5.6.6 (Chi-X) and (APX) and that wish to make a new connection of that system to ASX will need to undertake an initial certification of the system for use on ASX under Rule 5.6.6 (ASX).

Nature and scope of certification

- RG 241.150 The nature and scope of a particular certification will depend largely on the specific business operations of the market participant and the features of the AOP system used.
- RG 241.151 In evaluating the nature and scope of certification required, a market participant needs to consider and identify the key features of the AOP system—for example, whether it is primarily for client or proprietary flow, whether the client intends to further delegate access, or whether it involves highly automated flow.
- RG 241.152 By providing details of interconnected systems and automated controls that are not part of the AOP system but may further contribute to a market participant's ability to comply with Part 5.6, a market participant can demonstrate to ASIC the review process undertaken.

- RG 241.153 The name and version number of the AOP system that has been certified must be clearly stated in each certification in accordance with Rule 5.6.6(2)(b).
- RG 241.154 The market and order books for which the AOP system has been certified should also be stated in each certification.

How to provide certifications to ASIC

- RG 241.155 Certifications should be on the market participant's letterhead. They should be directed to the Senior Executive Leader, Market and Participant Supervision, ASIC via email at market.participants@asic.gov.au.

Review of material changes

- RG 241.156 Before making a material change to any of the organisational and technical resources, arrangements or controls employed to comply with Rule 5.6.3, a market participant must ensure that:
- (a) an appropriately qualified person reviews the material change in accordance with Rule 5.6.8(1) (see RG 241.164–RG 241.166); and
 - (b) it has obtained from the person referred to in RG 241.156(a) written representations about the material change in accordance with Rule 5.6.8(2) (see RG 241.164–RG 241.166).

What is a material change?

- RG 241.157 The term 'material' is a broad concept and should be considered in the context of the nature, scale and complexity of the business being conducted by the market participant through the AOP system.
- RG 241.158 The following changes would be considered material:
- (a) a change to any of the organisational or technical resources, arrangements or controls employed to comply with Rule 5.6.3 that may increase the potential for the market participant to fail to comply with its obligations under the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) or ASIC Market Integrity Rules (Competition);
 - (b) a series of such changes that when considered together may have the same material effect; or
 - (c) a change to an AOP system, or series of changes, that may result in the AOP system's organisational and technical resources, arrangements or controls no longer complying with Rule 5.6.3.
- RG 241.159 A market participant will need to take a practical approach when determining whether a particular change or series of changes to the organisational or technical resources, arrangements or controls employed to comply with

Rule 5.6.3 constitutes a 'material' change, regardless of whether made by the market participant or the system provider.

RG 241.160 A market participant should consider, at a minimum, the following factors when assessing whether a change is material:

- (a) the ability of the market participant to meet the requirements of Rule 5.6.3 after the change is made;
- (b) the potential for a change to result in trading activity that may interfere with the efficiency and integrity of the market provided by an operator;
- (c) the potential for a change to result in a breach of Part 5.7 (manipulative trading); and
- (d) the potential for a change to result in trading activity that may interfere with the proper functioning of the relevant market.

RG 241.161 We consider that, for the purposes of Rule 5.6.8, the following changes are examples of changes to the AOP system that may be associated with material changes to the organisational or technical resources, arrangements or controls employed to comply with Rule 5.6.3:

- (a) changes to upgrade from a 'basic' system to a 'complex' system—for example, from a single market to a multimarket system or from an automated principal-only order processing system to a system that will accommodate both principal and agency (i.e. an ACOP system);
- (b) changes to upgrade the functionality made available to clients which may impact the types of orders passed into the market;
- (c) changes to allow access for clients to additional order books or execution venues which may impact the types of orders and messages passed into the market;
- (d) the provision of ACOP or the addition of new client order flow which may impact the capabilities of the AOP filters and filter parameters;
- (e) a series of incremental changes to a system over a period of time that may, when considered together, constitute a material change based on the system at the time of its initial certification or previous annual review and notification (see RG 241.171–RG 241.183);
- (f) a change to the type, size and growth of client order flow that may require significant changes to system capacity;
- (g) a change to a latency-dependent solution (e.g. a co-location, hardware, or software configuration change);
- (h) a change that increases the risk of orders being entered or amended, which could create or appear to create a disorderly market or manipulative trading;

- (i) a change that increases the risk of orders being entered or amended resulting in a high order-to-trade ratio relative to the security, underlying market liquidity or current market volatility; and
- (j) a change to permit one or more clients to use more complex trading strategies.

RG 241.162 We consider that the following changes are examples of changes that may *not* be considered material changes for the purposes of Rule 5.6.8:

- (a) changes in a market participant's staff if the change does not adversely affect the market participant's ability to comply with the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) (e.g. the absence of a designated compliance person may be considered non-material but may require a review of DTR or responsible executive responsibilities under Parts 2.5 or 2.1);
- (b) a change to the appearance of the computer screen used to access the relevant execution venue; and
- (c) re-locating from one co-location facility to another facility provided by the same entity where no further additional changes beyond the movement of physical location have taken place (however, the market participant will remain responsible for reviewing its obligations under the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX), particularly if there are additional changes beyond the movement of physical location).

RG 241.163 A change from a third-party-provided system to a system provided by a new third party would be considered to be a new system (rather than a material change) requiring initial certification under Rule 5.6.6.

Review of material changes

RG 241.164 Under Rule 5.6.8(1), before making a material change to any of the organisational or technical resources, arrangements or controls employed to comply with Rule 5.6.3, a market participant must ensure that an appropriately qualified person (see RG 241.186–RG 241.190) reviews the material changes to the AOP system, the market participant's policies, procedures, system design documentation (including its procedures for implementation of subsequent changes to the AOP software, filters and filter parameters) and other relevant documentation concerning its compliance with Part 5.6: Rule 5.6.8.

RG 241.165 We note that the requirements to review policies, procedures and system design documentation (including procedures for implementation of subsequent changes to an AOP system's software, filters and filter parameters) are common to both Rules 5.6.4 and 5.6.8. Market participants may adopt the equivalent approach taken for the initial AOP review for a material change review, depending on the scope of that review.

RG 241.166 If a market participant is operating multiple AOP systems, we consider that when reviewing material changes to be made across those AOP systems,

certain documents would not need to be separately reviewed for each individual AOP system. This means that documentation, policies and procedures that apply across AOP systems could be considered in totality when reviewing material changes across those systems.

Representations

- RG 241.167 Before implementing a material change that is the subject of a material change review, the market participant must obtain written representations from the person who performed the material change review that nothing came to the attention of the person during the course of that review which would indicate that the market participant is unable to comply with Part 5.6: Rule 5.6.8(2). The representations must include the name of the person making the representation and be signed and dated by that person: Rule 5.6.8(3).
- RG 241.168 The purpose of obtaining the representations in Rule 5.6.8(2) is so that the market participant can provide the annual notification under Rule 5.6.8B, in which the market participant must confirm that nothing came to its attention during the 12 months before the annual review date which would indicate that it is unable to comply with Part 5.6.

Annual review and notification

Annual review

- RG 241.169 Under Rule 5.6.8A, a market participant must have an appropriately qualified person (see RG 241.186–RG 241.190) undertake an annual review, much like the review of material changes of the AOP system, of the market participant's policies, procedures, system design documentation (including the market participant's procedures for implementation of subsequent changes to the AOP software, filters and filter parameters) and other relevant documentation for compliance with Part 5.6.
- RG 241.170 When undertaking an annual review, a market participant needs to consider whether the nature of, or change to, existing flows is impacting either system efficiency or performance relative to the certification.
- RG 241.171 The purpose of the annual review under Rule 5.6.8A is so that the market participant can confirm to ASIC, by providing an annual notification under Rule 5.6.8B, that nothing has come to its attention during the 12 months before the annual review date which would indicate that the market participant is unable to comply with Part 5.6.

Note: See RG 241.102–RG 241.105 for our expectations on reviewing policies, procedures and system design documentation.

- RG 241.172 A market participant is not required to undertake an annual review of an AOP system if it has reviewed material changes to that AOP system (in accordance with Rule 5.6.8) within the 12 months before the annual review date: Rule 5.6.8A(1).
- RG 241.173 As with the review of material changes, if a market participant is operating multiple AOP systems, only one review across all systems is required: see RG 241.166.
- RG 241.174 If a market participant is operating multiple AOP systems and has conducted a review of material changes to one or any number of those systems (in accordance with Rule 5.6.8) within the 12 months before the annual review, the documentation, policy and procedures that are common to the relevant AOP and the other AOP systems would not need to be revisited as part of the annual review.

Review date

- RG 241.175 The annual review date is 1 November each calendar year. The annual notification (see RG 241.177–RG 241.182) must be given to ASIC within 10 business days of each annual review date. The confirmation in the annual notification relates to the 12-month period from 1 November in the previous calendar year until 31 October in the current calendar year.
- RG 241.176 If the period from the date of the initial certification to 1 November is significantly less than 12 months, we may consider giving a waiver from the requirement to give an annual notification for that period. This would be given on a case-by-case basis, having regard to the nature, scale and complexity of the AOP system and the business conducted by the market participant through that system. In this case, the first annual notification that we would expect is within 10 business days of the annual review date in the following calendar year.

Annual notification

- RG 241.177 A market participant must provide an annual notification to ASIC within 10 business days of the annual review date each year (see RG 241.175–RG 241.176): Rule 5.6.8B.
- RG 241.178 The notification must be in writing, signed and dated by two directors of the market participant, and set out the following matters:
- (a) the name of the market participant;
 - (b) the name and version number of the AOP system, or systems if the notification covers more than one system;
 - (c) a confirmation by the market participant that nothing came to the attention of the market participant during the 12 months before the annual review date which would indicate that the market participant is unable to comply with Part 5.6; and
 - (d) the name of the directors of the market participant signing the annual notification.

- RG 241.179 All annual notifications must meet these minimum requirements. We encourage market participants to provide the notification in the form set out in Appendix 2.
- RG 241.180 A market participant operating more than one certified AOP system can, for the purposes of an annual notification, consolidate the AOPs into one single annual notification.
- RG 241.181 A market participant who has an AOP system certified for use across multiple markets and/or operators can, for the purposes of an annual notification, consolidate the markets into each individual AOP and list them on the same notification.
- RG 241.182 The nature and scope of a particular review will depend largely on the specific business operations of the market participant and the features of the AOP system used. For an explanation of the nature and scope of initial certifications, which are also relevant to annual notifications, see RG 241.150–RG 241.154.

How to provide notifications to ASIC

- RG 241.183 Annual notifications should be on the market participant's letterhead. They should be directed to the Senior Executive Leader, Market and Participant Supervision, ASIC via email at market.participants@asic.gov.au.

Further certification

- RG 241.184 Under Rule 5.6.11, ASIC may direct a market participant to provide further certification of its compliance with Part 5.6 for an AOP system in a form acceptable to ASIC and from an appropriately qualified person acceptable to ASIC. The market participant must comply with ASIC's direction within the time specified in the direction.
- RG 241.185 Examples of the circumstances where we may require a further certification include, but are not limited to, the following:
- (a) where we are not satisfied with the quality of a review undertaken for a material change or an annual review;
 - (b) where we believe that an AOP system no longer operates in the manner for which it was initially certified; and
 - (c) where we believe that an AOP system no longer complies with requirements in Part 5.6.

Appropriately qualified persons/suitably qualified persons

- RG 241.186 Under Rule 5.6.5, the representations that accompany the initial certification of an AOP system must be made by persons whom the market participant

considers to be suitably qualified and experienced in the controls and systems for which they are making the representations.

- RG 241.187 Under Rules 5.6.8 and 5.6.8A, the review of material changes and annual review must be conducted by an appropriately qualified person, and that person must provide to the market participant representations relating to compliance with Part 5.6.
- RG 241.188 We do not intend to publish a list of persons who are qualified for these purposes, or specify minimum qualifications or experience for the purposes of these rules. It is the responsibility of the directors of the market participant to satisfy themselves that the relevant persons making the representations are qualified. Directors may wish to rely upon different persons to make representations about compliance with the different requirements of Rule 5.6.3 for the purposes of initial certification under Rule 5.6.6. Ideally, a responsible executive (as defined in Rule 1.4.3) should be a signatory to the documentation.
- RG 241.189 However, a market participant should consider the following qualifications when relying upon one or more persons to conduct an initial review, review of material changes or annual review:
- (a) relevant experience in broking operations, systems design, operational management and systems security;
 - (b) familiarity with the relevant market integrity rules (e.g. provisions relevant to AOP, in particular, orderly markets issues) and applicable law (e.g. market misconduct provisions in the Corporations Act); and
 - (c) relevant technical qualifications—due to the technological and interconnected nature of systems, there should be some indication of the person’s qualifications in this regard (e.g. Certified Information Systems Auditor issued by the Information Systems Audit and Control Association or its equivalent, ‘Systems Assurance Partner’ of an accounting organisation, tertiary qualification in computer science or a similar academic discipline and a minimum number of years experience in information systems audits).
- RG 241.190 We will take similar considerations into account in selecting an ‘acceptable person’ to perform a further certification in accordance with Rule 5.6.11: see RG 241.184–RG 241.185.

Appendix 1: Sample certification

This appendix sets out a sample certification that can be used as a template.

Certifications should be provided on the market participant's letterhead and addressed to: Senior Executive Leader, Market and Participant Supervision, ASIC, market.participants@asic.gov.au.

Certification of AOP compliance

This certification is given by [*insert name of market participant*] under Rule 5.6.6 of the [*ASIC Market Integrity Rules (ASX Market) 2010/ASIC Market Integrity Rules (Chi-X Australia Market) 2011/ASIC Market Integrity Rules (APX Market) 2013*].

Note: In this document 'Rule 5.6.6 (ASX)', 'Rule 5.6.6 (Chi-X)' and 'Rule 5.6.6 (APX)' or 'Part 5.6 (ASX)', 'Part 5.6 (Chi-X)' and 'Part 5.6 (APX)' (for example) refer to a particular rule or part of the ASIC market integrity rules for those markets (in this example numbered 5.6.6 and 5.6).

We have examined our obligations under the relevant market integrity rules, including those for automated order processing (AOP), and considered Regulatory Guide 241 *Electronic trading* (RG 241).

This certification is for version [*insert version number*] of [*insert name of system*] (the AOP system) to be connected to the following market(s) and trading platform(s):

- [*insert name of market(s) and trading platform(s)*].

In relation to the AOP system, we have reviewed our policies, procedures and system design documentation—including our procedures for implementing subsequent changes to the AOP software, filters and filter parameters—and other relevant documentation concerning compliance with [*Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)*]. Our review included all matters that we consider are necessary in the circumstances.

We confirm the following, based on the representations in Schedules A–F and our own inquiries:

- The AOP system [*does/does not*] permit automated client order processing (ACOP).
- The AOP system has in place the organisational and technical resources—including appropriate automated filters, filter parameters and processes to record any changes to the filters or filter parameters—to enable trading messages to be submitted into the trading platform(s) without interfering with the efficiency and integrity of the market(s) or the proper functioning of the trading platform(s).
- The AOP system has in place trading management arrangements—including appropriate automated filters, filter parameters and processes to record any changes to the filters or filter parameters—to enable the ready determination of the origin of all orders and trading messages.
- The AOP system has in place security arrangements to monitor for and prevent unauthorised persons having access to a gateway or an open interface device, or to a computer or other device connected to an open interface device, and to ensure that the AOP system does not interfere with the efficiency and integrity of the markets(s) or the proper functioning of the trading platform(s).

- The AOP system has in place controls—including automated controls—that enable immediate suspension, limitation or prohibition of the conduct of all AOP, ACOP or AOP in respect of one or more authorised persons, clients or products.
- The AOP system has in place controls that enable immediate suspension of, limitation of, or prohibition on, the entry into the market(s) of trading messages in a series of related trading messages where we have identified that trading messages in the series have entered a market and have interfered with or are likely to interfere with the efficiency and integrity of a market, and cancellation of trading messages in that series that have already entered the market(s).
- We have direct control over all automated filters and the filter parameters for those filters, in relation to the AOP system.
- Nothing has come to our attention during the course of our review which would indicate that we are unable to comply with [Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)].
- The representations in Schedules A–F have been made by persons we consider to be suitably qualified and experienced in the organisational and technical resources, arrangements and controls for which they are making those representations.

Director Date

Director Date

Schedule A: Organisational and technical resources

I confirm the following, based on my own inquiries:

- The AOP system has in place the organisational and technical resources—including appropriate automated filters, filter parameters and processes to record any changes to the filters or filter parameters—that I consider are necessary for trading messages to be submitted to the trading platform(s) without interfering with the efficiency and integrity of market(s) or the proper functioning of the trading platform(s).
- Nothing has come to my attention during the course of my review which would indicate that [*insert name of market participant*] is unable to comply with [Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)].

Name Signature Date

Schedule B: Trading management arrangements

I confirm the following, based on my own inquiries:

- The AOP system has in place trading management arrangements—including appropriate automated filters, filter parameters and processes to record any changes to the filters or filter parameters—that I consider are necessary to readily determine the origin of all orders and trading messages.
- Nothing has come to my attention during the course of my review which would indicate that *[insert name of market participant]* is unable to comply with *[Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)]*.

Name	Signature	Date

Schedule C: Security arrangements

I confirm the following, based on my own inquiries:

- The AOP system has in place security arrangements that I consider are necessary to monitor for and prevent unauthorised persons having access to a gateway or an open interface device, or to a computer or other device connected to an open interface device, and to ensure that the AOP system does not interfere with the efficiency and integrity of market(s) or the proper functioning of the trading platform(s).
- Nothing has come to my attention during the course of my review which would indicate that *[insert name of market participant]* is unable to comply with *[Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)]*.

Name	Signature	Date

Schedule D: Controls for suspension, limitation or prohibition of AOP

I confirm the following, based on my own inquiries:

- The AOP system has in place controls, including automated controls, that enable immediate suspension, limitation or prohibition of the conduct of all AOP, ACOP or AOP in respect of one or more authorised persons, clients or products.
- Nothing has come to my attention during the course of my review which would indicate that *[insert name of market participant]* is unable to comply with *[Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)]*.

Name	Signature	Date

Schedule E: Controls for suspension, limitation or prohibition of trading messages

I confirm the following, based on my own inquiries:

- The AOP system has in place controls that enable immediate suspension of, limitation of, or prohibition on, the entry into the market(s) of trading messages in a series of related trading messages where [*insert name of market participant*] has identified that trading messages in the series have entered a market and have interfered with or are likely to interfere with the efficiency and integrity of a market, and cancellation of trading messages in that series that have already entered the market(s).
- Nothing has come to my attention during the course of my review which would indicate that [*insert name of market participant*] is unable to comply with [Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)].

Name	Signature	Date

Schedule F: Direct control over filters and filter parameters

I confirm the following, based on my own inquiries:

- [*Insert name of market participant*] has direct control over all automated filters and the filter parameters for those filters, in relation to the AOP system.
- Nothing has come to my attention during the course of my review which would indicate that [*insert name of market participant*] is unable to comply with [Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)].

Name	Signature	Date

Schedule G: Certification methodology

Attached is a copy of the methodology used by the persons identified in Schedules A–F to make the representations in those schedules.

Appendix 2: Sample annual notification

This appendix sets out a sample annual notification that can be used as a template.

Annual notifications should be provided on the market participant's letterhead and addressed to: Senior Executive Leader, Market and Participant Supervision, ASIC, market.participants@asic.gov.au.

Annual notification of AOP compliance

This notification is given by [*insert name of market participant*] under Rule 5.6.8B of the [*ASIC Market Integrity Rules (ASX Market) 2010/ASIC Market Integrity Rules (Chi-X Australia Market) 2011/ASIC Market Integrity Rules (APX Market) 2013*].

Note: In this document 'Rule 5.6.8B (ASX)', 'Rule 5.6.8B (Chi-X)' and 'Rule 5.6.8B (APX)' or 'Part 5.6 (ASX)', 'Part 5.6 (Chi-X)' and 'Part 5.6 (APX)' (for example) refer to a particular rule or part of the ASIC market integrity rules for those markets (in this example numbered 5.6.8B and 5.6).

We have examined our obligations under the relevant market integrity rules, including those for automated order processing (AOP) and considered Regulatory Guide 241 *Electronic trading* (RG 241).

This notification is for the AOP system(s) and version(s) connected to trading platform(s) as listed in Schedule A.

We confirm, for the purposes of [*Rule 5.6.8B (ASX)/Rule 5.6.8B (Chi-X)/Rule 5.6.8B (APX)*], that nothing came to our attention during the 12 months period from 1 November [*previous calendar year*] to 31 October [*current calendar year*] which would indicate that the trading participant is unable to comply with [*Part 5.6 (ASX)/Part 5.6 (Chi-X)/Part 5.6 (APX)*].

_____	_____	_____
Name of director	Signature	Date
_____	_____	_____
Name of director	Signature	Date

Schedule A: Details of AOP system(s), trading platform(s) and material changes

Name of system	Version	Date of initial certification or previous annual notification	Trading platform(s)

[Include or attach the following:

- *details of the AOP(s) the notification is intended to cover, including the last version(s) to which a previous initial certification or annual notification applies, and the most recent version(s) to which this notification applies; and*
- *details of the trading platform(s) connected to the relevant AOP system(s) and to which this notification applies, including the number of instances that each AOP is connected to each platform.]*

Key terms

Term	Meaning in this document
ACOP (automated client order processing)	AOP for an order submitted by an authorised person into the market participant's trading system, as distinct from AOP for an order submitted by the market participant as principal
AFS licence	An Australian financial services licence under s913B of the Corporations Act that authorises a person who carries on a financial services business to provide financial services Note: This is a definition contained in s761A of the Corporations Act.
AFS licensee	A person who holds an AFS licence under s913B of the Corporations Act Note: This is a definition contained in s761A of the Corporations Act.
algorithm or algorithmic trading	Electronic trading activity where specific execution outcomes are delivered by predetermined parameters, rules and conditions
AOP (automated order processing)	The process by which orders are registered in a market participant's system, which connects it to a market. Client or principal orders are submitted to an order book without being manually keyed in by an individual (referred to in the rules as a DTR). It is through AOP systems that algorithmic programs access our markets
APX	Asia Pacific Exchange Limited or the exchange market operated by APX
ASIC	Australian Securities and Investments Commission
ASIC Market Integrity Rules (APX)	ASIC Market Integrity Rules (APX Market) 2013—rules made by ASIC under s798G of the Corporations Act for trading on APX
ASIC Market Integrity Rules (ASX)	ASIC Market Integrity Rules (ASX Market) 2010—rules made by ASIC under s798G of the Corporations Act for trading on ASX
ASIC Market Integrity Rules (ASX) and (Chi-X)	ASIC Market Integrity Rules (ASX) and ASIC Market Integrity Rules (Chi-X)
ASIC Market Integrity Rules (Chi-X)	ASIC Market Integrity Rules (Chi-X Australia Market) 2011—rules made by ASIC under s798G of the Corporations Act for trading on Chi-X
ASIC Market Integrity Rules (Competition)	ASIC Market Integrity Rules (Competition in Exchange Markets) 2011—rules made by ASIC under s798G of the Corporations Act that are common to markets dealing in equity market products quoted on ASX

Term	Meaning in this document
ASX	ASX Limited (ACN 008 624 691) or the exchange market operated by ASX Limited
ASX 24	The exchange market formerly known as Sydney Futures Exchange (SFE), operated by Australian Securities Exchange Limited
ASX guidance notes	Guidance notes providing assistance to ASX market participants on ASX's interpretation of the former ASX Market Rules
authorised person	A person who: <ul style="list-style-type: none"> • is either: <ul style="list-style-type: none"> – a client of a trading participant; – an agent of a client of a trading participant; or – a representative of a trading participant; and • is permitted by a trading participant to submit orders into the trading participant's system
automated trading	See 'AOP'
Chapter 5 (for example)	A chapter of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) (in this example, numbered 5), unless otherwise specified
Chapter 6 (Competition) (for example)	A chapter of the ASIC Market Integrity Rules (Competition) (in this example, numbered 6)
Chi-X	Chi-X Australia Pty Limited or the exchange market operated by Chi-X
Corporations Act	<i>Corporations Act 2001</i> , including regulations made for the purposes of the Act
CP 168	ASIC consultation paper <i>Australian equity market structure: Further proposals</i> , released 20 October 2011
crossing system	An automated service provided by a market participant which matches or executes client orders with orders of: <ol style="list-style-type: none"> (a) the market participant (i.e. against the market participant's own account); (b) other clients of the market participant; or (c) any other person whose orders access the automated service. <p>otherwise than on an order book of a licensed market.</p>
DEA (direct electronic access)	An arrangement between a participant of a licensed market under which authorised person submits orders directly into the licensed market using the participants trading system

Term	Meaning in this document
dealing rules	ASIC market integrity rules for the ASX and Chi-X markets and the operating rules of the ASX and Chi-X markets that govern the submission of orders and the execution and reporting of market transactions on a trading platform
DTR (designated trading representative)	Representative of the market participant that has been authorised by the participant to submit trading messages to the execution venue on behalf of the participant
electronic trading	Includes algorithmic programs, AOP, ACOP and DEA
equity market products	Shares, managed investment schemes, the right to acquire by way of issue shares and managed investment schemes, and CHESS Depository Interests admitted to quotation on ASX
exchange market	<p>A market that enables trading in listed products, including via a central limit order book</p> <p>Note: Not all exchange markets offer primary listings services.</p>
execution venue	<p>A facility, service or location on or through which transactions in equity market products are executed and includes:</p> <ul style="list-style-type: none"> • each individual order book maintained by a market operator; • a crossing system; and • a market participant executing a client order against its own inventory otherwise than on or through an order book or crossing system. This includes an order book and other matching mechanisms
filters	A set of rules that apply to an AOP system and that automatically determine which trading messages (or series of related trading messages) meet a pre-defined set of criteria and can pass into a trading platform
filter parameters	Variables within each filter that can be changed to modify the operation of the filter without changing the rule to which the filter applies
financial market	As defined in s767A of the Corporations Act. It encompasses facilities through which offers to acquire or dispose of financial products are regularly made or accepted
financial product	<p>Generally a facility through which, or through the acquisition of which, a person does one or more of the following:</p> <ul style="list-style-type: none"> • makes a financial investment (see s763B); • manages financial risk (see s763C); and • makes non-cash payments (see s763D) <p>Note: See Div 3 of Pt 7.1 of the Corporations Act for the exact definition</p>

Term	Meaning in this document
liquidity	The ability to enter and exit positions with a limited impact on price
market integrity rules	Rules made by ASIC, under s798G of the Corporations Act, for trading on domestic licensed markets
market operator	A holder of an Australian market licence that is the operator of a financial market on which equity market products are quoted
market participant	An entity that is a participant of a financial market on which financial products are quoted
order-to-trade ratio	The number of times orders submitted into an order book are amended or cancelled relative to the execution of a trade
order	In RG 241.56–RG 241.56 only, means trading messages destined for a market, and orders destined for a crossing system. For all other references in RG 241 it has the same meaning as in Rule 1.4.3.
Part 5.5 (for example)	A part of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) (in this example, numbered 5.5), unless otherwise specified
Part 6.3 (Competition) (for example)	A part of the ASIC Market Integrity Rules (Competition) (in this example numbered 6.3)
representative	Has the same meaning as in s910A of the Corporations Act
RG 214 (for example)	An ASIC regulatory guide (in this example, numbered 214)
Rule 5.5.1 (for example)	A rule of the ASIC Market Integrity Rules (ASX), (Chi-X) and (APX) (in this example, numbered 5.5.1), unless otherwise specified
Rule 5.6.6 (APX) (for example)	A rule of the ASIC Market Integrity Rules (APX) (in this example, numbered 5.6.6)
Rule 5.6.6 (ASX) (for example)	A rule of the ASIC Market Integrity Rules (ASX) (in this example, numbered 5.6.6)
Rule 5.6.6A (Chi-X) (for example)	A rule of the ASIC Market Integrity Rules (Chi-X) (in this example, numbered 5.6.6A)
Rule 6.5.1 (Competition) (for example)	A rule of the ASIC Market Integrity Rules (Competition) (in this example, numbered 6.5.1)
s798G (for example)	A section of the Corporations Act (in this example, numbered 798G)

Term	Meaning in this document
short selling	The practice of selling financial products that are not owned by the seller, with a view to repurchasing them later at a lower price. Short sales can be naked or covered
sponsored access	An arrangement where a market participant permits an authorised person to electronically transmit orders for execution directly to the market without passing through the participants infrastructure
trading messages	Messages submitted into a trading platform relating to trading functions, such as orders, amendment or cancellation of orders and the reporting or cancellation of market transactions on the trading platform
trading platform	A facility made available by the market operator to market participants for the entry of trading messages, the matching of orders, the advertisement of invitations to trade and the reporting of transactions

Related information

Headnotes

algorithmic programs, automated client order processing (ACOP), automated order processing (AOP), automated trading, designated trading representative (DTR), direct electronic access (DEA), electronic trading, filter parameters, filters, market integrity rules

Regulatory guides

RG 172 *Australian market licences: Australian operators*

RG 214 *Guidance on ASIC market integrity rules for ASX and ASX 24 markets*

RG 216 *Markets Disciplinary Panel*

RG 223 *Guidance on ASIC market integrity rules for competition in exchange markets*

RG 224 *Guidance on ASIC market integrity rules for Chi-X and APX markets*

RG 225 *Markets Disciplinary Panel practices and procedures*

RG 226 *Guidance on ASIC market integrity rules for capital and related requirements: ASX, ASX 24, Chi-X and APX markets*

Legislation

Corporations Act, Div 3 of Pt 7.1, s761A, 763B–D, 767A, 798G, 910, 913B

Consultation papers and reports

CP 145 *Australian equity market structure: Proposals*

CP 168 *Australian equity market structure: Further proposals*

CP 179 *Australian market structure: Draft market integrity rules and guidance*

CP 184 *Australian market structure: Draft market integrity rules and guidance on automated trading*

CP 202 *Dark liquidity and high-frequency trading: Proposals*

REP 215 *Australian equity market structure*

REP 290 *Response to submissions on CP 168 Australian equity market structure: Further proposals*

REP 311 *Response to submissions on CP 179 and CP 184 Australian market structure: Draft market integrity rules and guidance*

REP 331 *Dark liquidity and high-frequency trading*