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09 August 2019

Mr Andrew McPherson
Senior Specialist
Market Infrastructure
Australian Securities and Investment Commission
Level 5, 100 Market Street, Sydney, NSW 2000

BY EMAIL: rules.resilience@asic.gov.au

Dear Andrew,

Thank you for the opportunity to comment upon the proposals set out in ASIC Consultation Paper CP314 *Market integrity rules for technological and operational resilience.*

We wish to comment upon the proposal to update Market Integrity Rules with Chapter 8A Market Operators – Critical Systems and Business Continuity Plans

SSX is an Australian Market Operator (AMO) licensed under Pt.7.2 of the Corporations Act and operates under the guidance of ASIC GN 172. SSX has its own Listing Rules and Business Rules and is independent of other AMOs in terms of product issuance and trade execution. SSX currently settles its trades through CHESS.

As an AMO, SSX has in place most of the arrangements required by the proposed Chapter 8A. However, SSX wishes to acknowledge the consistent approach taken in GN172 that the arrangements for operating the market should take into consideration the exchange's nature, scale and complexity. These should include but not limited to the tier of the market licence, the products that are available, the size, volume, trade frequency and liquidity of the market, the interoperability with other AMOs, and the impact from an event of operational disruption.

Taking account of the principles above, SSX responds to the consultation questions and proposed MIR drafting as follows:

B1Q1 Do you agree with the definition of 'critical systems' and 'critical systems arrangements'? In your response, please give detailed reasons for your answer.

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Yes.

However, we notice that the Note under Critical System has illustrated “dissemination of market data”, not “capture of market data”. Market operators generate, derive and receive data and metadata from multiple sources. These include orders, trades, participant information, company announcements, etc. Some of this information is price sensitive, and the process of capturing these data should also be considered as Critical System. Hence, we suggest inserting “capture of market data” in the Note as an illustration.
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<tr><td>B1Q2 Do you agree that market participants and market operators should have rules that require them to have in place adequate arrangements for critical systems?</td></tr>
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We think that market operators should “have rules that require them to have in place adequate arrangements for critical systems given considerations of the nature, scale and complexity of the Operator and its operations and services.”

We propose:
Insert “which are appropriate to the nature, scale and complexity of the Operator’s Critical Systems, Market Operations and Market Services” after “adequate arrangements (Critical System Arrangements)” in 8A.3.1 (1). We refer to RG 172.69 and RG 172.70 and propose to insert the wording to provide an explicit context when considering arrangement adequacy.
</td></tr>
<tr><td>B1Q3 Do you agree with the types of arrangements that market participants and market operators should have to ensure the continued reliability of their critical systems?</td></tr>
<tr><td>Yes, subject to matter raised elsewhere in this paper.</td></tr>
<tr><td>B1Q4 Do you see any challenges for institutions in complying both with the proposed rules and other obligations they may be subject to including, for example, under Basel II or the Financial Stability Standards? In your response, please give detailed reasons for your answer.</td></tr>
<tr><td>No Comments</td></tr>
<tr><td>B1Q5 How will these proposed rules affect your business? If you are a market operator or market participant, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your expenditure on your current critical systems arrangements.</td></tr>
<tr><td>As a Tier 1 market operator, we already have most of the proposed controls in place and we consider them to be adequate and sufficient to the nature, scale and complexity of our market, services and operations. The proposed rules would impose more requirements. However, we do not foresee a significate cost impact at the moment provided the proposed changes are considered and incorporated in the final draft. We refer to CP314.39 where six-month transitional period is allowed from the date the proposed rules are made. We submit that we estimate that this is sufficient given the nature scale and complexity of our implementation.</td></tr>
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B2Q1 Do you agree that market participants and market operators should have rules that require them to have in place adequate arrangements for change management of critical systems?
Yes
B2Q2 Do you agree with our proposed rule? If you disagree, please give detailed reasons why
Yes.
B2Q3 How will this proposed rule affect your business? If you are a market participant or market operator, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your current expenditure on arrangements for change management of critical systems.
Same as B1Q5.

B3Q1 Do you agree with our proposed rule that requires market operators and market participants to have outsourcing arrangements? If not, please give detailed reasons why you disagree.
Refer to further details below.
B3Q2 Do you agree with the definition of 'outsourcing arrangement'? In your response, please give detailed reasons for your answer
Yes, on the basis that it includes reference to critical systems and is limited to critical systems only.
B3Q3 Do you consider that the definition of 'outsourcing arrangement' covers the provision of services provided by all third-party service providers and not just those that may have been performed by the entity itself? If not, what if any risks do you see in relation to the provision of services by these entities?
Yes
B3Q4 Do you agree with the specific outsourcing arrangements proposed?
AMOs may already have existing outsourcing arrangements and may not be able to review/replace them immediately upon implementation of the proposed MIRs. The proposed MIRs and/or any amended Regulatory Guide should allow AMOs to grandfather existing contracts. We note that under proposed MIR 8A.3.3(2) an Operator must comply with subrule(1) in a manner that is appropriate to the nature, complexity and risks of the Outsourcing Arrangements and to the materiality of

the Outsourcing Arrangement to the Operator's Market Operations and Market Services. We submit that, whilst we agree with these principles, regard should also be had to the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services. If the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services are, themselves, not relatively material or significant, then requiring compliance solely by reference to the criteria in 8A.3.3(2)(a) and (b) could become an onerous obligation of little benefit to the market and significant detriment to the Operator. We would, therefore, like to see the existing (a) and (b) renumbered to (b) and (c) respectively, with (a) being "the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services".

(2) The Operator must comply with subrule (1) in a manner that is appropriate to:

(a) the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services

(~~a~~b) the nature, complexity and risks of the Outsourcing Arrangement; and

(~~b~~c) the materiality of the Outsourcing Arrangement to the Operator's Market Operations and Market Services.

We refer to 8A.3.3(4) where Operators must give written notice to ASIC a reasonable time before the Operator enters into an Outsourcing Arrangement, and the rationale in CP314.80 that ASIC needs to gather information for emerging risks (including concentration risks).

We agree with ASIC that there are risks associated with outsourcing arrangements and AMOs must have a formal written contract in place with service providers. We agree that, as set out in CP314.68, market operators and market participants cannot outsource their responsibility for meeting regulatory obligations to a service provider. However, any Outsourcing Arrangement is a commercial arrangement between the parties. The commercial terms of these arrangements (including service level arranagments) will, in many instances, continue to be negotiated up until the point of execution. If ASIC's intent is to have advance notice of an Operator entering into an Outsourcing Arrangement then, at best, all the Operator could provide is advance notice of intent to enter into such an arrangement. However, we would like to stress that this information is commercially sensitive.

Whilst the outsourcing risk lies with the market operator, we do not think that notifying ASIC of such a commercial arrangement a reasonable time before its execution will help to mitigate risks unless ASIC can provide specific examples of where that would be the case. On the contrary, it may cause unforeseeable delays to the commercial negotiations between the parties, which may cause a subsequent delay in the implementation of the Outsource Arrangement. Further, advance notice is not consistent with the stated intent of gathering market information. Notice provided after entering into such an arrangement would be consistent with the stated intent. The concept of advance notice is more indicative of a potential desire for ASIC to have a role in the determination of the Outsourcing Arrangements, which in our view is undesirable.

We note that there is no guidance as to what form or content the notice required under proposed MIR 8A.3.3(4) should take. Inevitably, the quality of market intelligence gathered by ASIC will depend upon the level of detail provided in the notice. However, a requirement for excessive detail is very likely to be commercially undesirable for negotiating parties. We propose the rule should be expanded to prescribe

the minimum level of information to be provided to ASIC, as per the suggested amendments to rule 8A.3.3(4), as set out below

We note concentration risk is given as an example to justify proposed MIR 8A.3.3(4). We note proposed MIR 8A.3.3(3) where operators are required to consider the provider's ability and capacity in providing the service, and the operator must take into account the extent to which the service provider is providing the same or similar services to other operators or participants.

Certainly, if a service provider is providing the same or similar services to other operators or participants then this could be interpreted as a positive indicator of the quality of the provider and their service. We also understand that if a provider is providing similar services to multiple operators, resource insufficiency may be an issue in the event of a systemic issue where all operators are impacted and calling upon the same resource. It is a matter for the Operator to mitigate these risks by choosing a different provider upfront; or in case of a system, a different product line with a separate support team; or have a resource adequacy and priority requirement clause in the outsourcing agreement. We do not believe that notifying ASIC will have the effect of mitigating this type of risk, nor do we think that ASIC can or should share Operator-related information regarding a provider with Operators to avoid concentration risk. We submit that ASIC should exercise care in how it utilises the information it gathers as a result of proposed MIR 8A.3.3(4).

Finally, we submit that a materiality test should be applied to proposed MIR 8A.3.3(4).

Hence, we suggest to delete 8A.3.3 (4) or change it to the wording below:

> (4) An Operator must give written notice to ASIC ~~a reasonable time before~~ <u>as soon as practicable after</u> the Operator enters into an Outsourcing Arrangement <u>which is material to its Critical Systems. The notice must identify the parties to the Outsourcing Arrangement, the Critical System and the nature and scope of the services provided by the Service Provider under the Outsourcing Arrangement.</u>

Furthermore, we submit draft MIR 8A.3.3(1)(f) and (g) should be combined for practical purposes. Below is our rationale for this proposal:

We note the wordings in proposed MIR 8A.3.3(1)(g) are substantially similar to the wordings in RG 172.144(e), specifically, "… and ensure we have the same access to such books, records and information that we would have if not for the outsourcing arrangement." Our view is it is practical for such wordings to be included in an ASIC Regulatory Guide for the purposes of providing guidance to Operators.

However, if these wordings are enshrined into laws, the scope of this MIR will be so wide, that it would be impractical, and potentially not feasible, for Operators to enforce this effectively on a Service Provider via a contractual arrangement.

For example, an Operator may not be able to satisfy itself that **all** books, records and other information relating to the Critical Systems have been provided to the Operator, other than relying on what has been provided by the Service Provider.

We submit this MIR places a very heavy legal burden on Operators and it can very potentially cause an Operator to not be able to meet this obligation, if the wordings in RG172.144(e) are made into laws.

We submit the combining of draft MIR 8A.3.3(1)(f) and (g) will achieve the intended effect of requiring Operators to provide ASIC with access to books, records and other information relating to the Critical Systems, as Operators have the obligations of requesting this information from their Service Providers for the purposes of enabling Operators to comply with its statutory and licence obligations.

Below is our suggested amendment:

(f) ensure that the Operator and its auditors are able to promptly, upon request, access books, records and other information of the Service Provider relating to the Critical Systems, <u>to enable the Operator to comply with its statutory and licence obligations, including providing ASIC with access to these books, records and other information relating to the Critical Systems</u>; and

B3Q5 Do you consider that the risks associated with outsourcing to the cloud warrant a rule specific to that outsourcing arrangement? In your response, please give reasons for your answer.
No comments.
B3Q6 How will these proposed rules affect your business? If you are a market participant or market operator, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your expenditure on your current outsourcing arrangements.
Same as B1Q5.

B4Q1 Do you agree with the proposed rules? If not, please give detailed reasons why you disagree.
Yes.
B4Q2 Should the proposed requirement for market operators to notify ASIC of any unauthorised access to or use of their critical systems and market-sensitive, confidential or personal data be extended to market participants? Please provide detailed reasons for your answer.
No comments
B4Q3 How will these proposed rules affect your business? If you are a market participant or market operator, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your expenditure on your data protection arrangements.

Same as B1Q5.

B5Q1 Do you agree with the definition of 'incident' and 'major event'? In your response, please give detailed reasons for your answer.
Yes.
B5Q2 Do you agree with our proposed rule that requires market operators and participants to have plans for dealing with an incident or major event? If not, please give detailed reasons why you disagree.
Yes
B5Q3 Do you agree with the frequency of reviewing and testing incident management and business continuity plans?
We refer to proposed MIR 8A.4.1(8)(a)(ii)(B) which requires market operators to conduct BCP testing every three months. We believe that the frequency of BCP testing should be related to "the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services". We submit that a minimum requirement of annual BCP testing is appropriate in the MIRs. More frequent BCP testing may be required if the operator is a large organisation and has multiple stakeholders involved in business continuity practice. In such cases a successful BCP relies on detailed procedures and accurate execution to operate efficiently. The case where two exchanges are dependent on each other is a good example of where robust BCP arrangements are required. This may, for example be the case with ASX and Chi-X at present, or a bond cash market operator and a bond derivatives market operator. Similarly, where an exchange represents a significant share of market volume it is appropriate to have more frequent and robust BCP testing. Frequent BCP can help to finetune the process and ensure the preparedness of the staff. However, in a smaller organisation, with small volume and a less than significant share of market volume there is a lesser need to have frequent BCP testing. Similarly, there is a lesser need where there is no interdependency between a market operator and any other market operator. Internally, team members work in a much closer environment and know each other in person. Miscommunication is less of a risk in comparison to that of a big organisation and cooperation between team members is more effective. Frequent BCP testing may not add much value, but requires a substantial amount of resources. We feel proposed MIR 8A.4.1(8)(a)(ii)(B) should be amended to the following effect (noting that different values may be desired by ASIC): (B) in the case of the Business Continuity Plans, where an Operator

(i) accounts for more that 25% of the aggregate market share in the classes of products for which it provides markets; or
(ii) operates markets upon which other Operators are reliant for the maintenance of a fair, orderly and transparent market;

at least once every 3 months, otherwise at least once every 12 months for an Operator not captured by (i) or (ii) above, having regard to the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services.

B5Q4 Do you agree with the specific arrangements required in an incident management plan or business continuity plan?

We refer to Notification of Incident requirement in proposed MIR 8A.4.1

In particular, we refer to proposed MIR 8A.4.1(6) where the clause requires the market operator to notify ASIC immediately upon becoming aware of the incident or major event.

We believe that notification to ASIC will not, and should not be, the first priority of an Operator. We submit that the priority of notification to ASIC ahead of the market is inappropriate and the drafting of the proposed MIR sends a subtle and inappropriate prioritisation.

Given that incident management usually encompasses a number of diagnostic phases, including an impact and potential response analysis, we submit that a reasonableness test should also be included to allow the Operator to communicate on a well informed basis.

We appreciate that proposed MIR 8A.4.1.6(a) applies to all Operators and proposed MIR 8A.4.1.6(b) only applies to those Operators that may be impacted by an Incident or Major Event.

We propose changes as below:

(6) Without limiting paragraph (4)(g), an Operator must:
(~~b~~a) notify other Operators, operators of Clearing Facilities and Participants that may be impacted by an Incident that may interfere with the fair, orderly or transparent operation of any Market ~~referred to in subparagraph (ab)(i)~~ or by a Major Event, ~~as soon as practicable~~ immediately after becoming aware of the Incident or Major Event; and
(~~a~~b) notify ASIC ~~immediately~~ as soon as reasonably practicable after becoming aware of:
(i) an Incident that may interfere with the fair, orderly or transparent operation of any Market; or
(ii) a Major Event.

In the event of an emergency, our first priority is to ensure the market continues to operate in a fair, orderly and transparent manner.

A typical Incident handling process would be first to identify the impacted area, assess the situation, decide and implement the mitigation and communicate to the impacted stakeholders. These steps usually

take place concurrently in a highly stressed environment, and drain a lot of resources. Notifying ASIC as the first priority in the event of an emergency may not help to mitigate or remedy the situation in a timely manner.

Therefore, we propose to change the sequence of clause (6)(a) and (6)(b) to reflect the natural sequence of events taking place. We also propose to change the timing to notify ASIC from "immediately" to "as soon as reasonably practicable".

Where operators are required to provide an Incident Report to ASIC within seven days of the notification of the incident or major event. We propose the change to MIR 8A.4.1(7) as below:

> (7) If a notification is made under subrule (6), the Operator must as soon as reasonably practical and, in any event, within ~~seven~~ thirty days of the notification provide ASIC with a written report detailing:
>
> (a)the circumstances of the Incident or Major Event; and
>
> (b)the steps taken to manage the Incident or Major Event.

The timing of provision of a report containing the information proposed by ASIC depends on the nature and scope of the incident or major event. The investigation and diagnosis themselves may take a long time to complete. An incident may be led by a chain of events ranging from human error, software defects, hardware failure, network disruption, power outage. etc. Whilst some situations are more explicit than others and maybe easier to identify, there are circumstances where incidents are difficult to reproduce and investigate. There must also be allowance for time for system providers, where appropriate, to analyse and report to the Operator. The seven-day time limit proposed may not be consistent with the SLAs in place with those providers.

We believe seven days may not be sufficient to complete an Incident Report with the required details, hence we propose to change it to thirty days

B5Q5 How will these proposed rules affect your business? If you are a market participant or market operator, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your expenditure on incident management and business continuity arrangements.
Same as B1Q5.

B6Q1 Do you agree with our proposal to introduce this rule to ensure adequate governance arrangements and resourcing? If you do not agree, please provide detailed reasons why you disagree.
Yes. Given considerations of the nature, scale and complexity of the organization. We propose to amend MIR 8A.5.1 as follows:

(1) An Operator must have ~~appropriate~~ governance arrangements ***which are appropriate to the nature, scale and complexity of the Operator's Critical Systems, Market Operations and Market Services,*** and adequate financial, technological and human resources to comply with its obligations under this Chapter 8A.
B6Q2 How will these proposed rules affect your business? If you are a market participant or market operator, please provide an estimate of the time and costs to implement these arrangements. In providing this estimate, please compare this with your expenditure on governance arrangements.
Same as B1Q5.

B7Q1 Do you agree with our proposal to introduce this rule to ensure fair access to the market? If you do not agree, please provide detailed reasons why you disagree.
Yes.
B7Q2 How will this proposed rule affect your business? If you are a market operator, please provide an estimate of the time and costs to implement this fair access rule.
Same as B1Q5.

B8Q1 Do you agree with our proposal to introduce trading controls? If you do not agree, please provide detailed reasons why you disagree.
Yes, We agree that operators should have trading controls, however, are concerned with mandating an automated trading control. We note that the MIRs define Automated Order Processing (AOP) to mean the process by which orders are registered in a Trading Participant's system and, if accepted for submission into a Trading Platform by the Trading Participant, submitted as corresponding Trading Messages without being keyed or rekeyed by a DTR. We submit that different levels of automated control by a market Operator are appropriate depending upon whether the market adopts automated order processing or not. The risks between manual order entry markets and AOP markets are significant. We agree that where a market accepts AOP, there should be a higher level of automated controls. However, automated controls may not be necessary or appropriate for a low volume non-AOP market It is to our understanding that automated trading control is effective when market liquidity and trading frequency are significant. Mandating an automated solution may not be necessary nor effective for a small

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exchange. Hence, the appropriateness of the controls should be relative to the risks presented to the operation of a fair, orderly and transparent market. Not specifying automated controls for all markets does not preclude markets from adopting them if they so wish, but it does preclude mandating inappropriate, anti-competitive and unnecessary controls.

We propose that proposed MIR 8A.2.2 be amended to the following effect:

(a) An Operator must have controls that enable immediate suspension, limitation or prohibition of the entry by a Participant of Trading Messages where required for the purposes of ensuring the Market is fair, orderly and transparent. The controls must be appropriate having regard to the nature, complexity and scale of the Market.
(b) Where an Operator accepts Trading Messages into a Market by way of Automated Order Processing, the controls must include appropriate automated controls.
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<tr><td>B8Q2 How will these proposed rules affect your business? If you are a market operator, please provide an estimate of the time and costs to implement these trading controls.</td></tr>
<tr><td>If automated controls are mandated for a market which does not have Participants entering Trading Messages by way of Automated Order Processing, the costs of implementation will be prohibitive and disproportionate.</td></tr>
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Regards,

Leo Zhang

Manager – Market Control & Exchange Technology