

ASX Limited ABN 98 008 624 691 20 Bridge Street Sydney NSW 2000 PO Box H224 Australia Square NSW 1215

Telephone 61 2 9227 0000 www.asx.com.au

22 July 2011

CPSS-IOSCO Principles for financial market infrastructures

Dear CPSS and IOSCO Secretariats,

ASX Group would like to thank CPSS and IOSCO for the opportunity to respond to *Consultative report: Principles* for financial market infrastructures. ASX looks forward to working closely with CPSS and IOSCO, national regulators and market users as the proposal is refined and eventually finalised. Please find a copy of our submission attached.

Given the significance of the issues being considered and the diversity of FMI market structures, governance arrangements and operational procedures, ASX believes that it would be appropriate for another Consultative report to be circulated for comment before the principles are finalised. This will be required in order to account for the important views of market users which, in the Australian context, have only recently been able to turn their attention to the potential impact on clearing participants based on details from us of the expected impact on ASX's CCPs. We also consider that any future consultation should include the opportunity to comment on the proposed assessment mechanism such as that used in *Recommendations for Central Counterparties* (November 2004). This would allow FMIs to fully assess the impact of the reforms being considered.

We would be happy to discuss any of these issues or matters raised in our response to the Consultative report and are keen to maintain ongoing contact and assist in any way to explain the impact of the proposed CPSS-IOSCO principles on our market. If you have any comments or questions, please contact Joshua Everson at joshua.everson@asx.com.au or phone: +612 9227 0233.

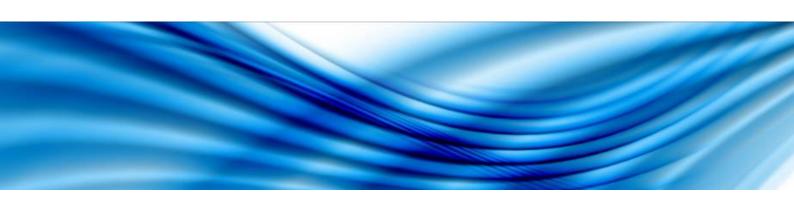
Robert Elstone

ours sincerely

Managing Director and CEO



CPSS-IOSCO: Principles for Financial Market Infrastructures



ASX Submission

Contents

	Page		
<u>Context</u>			
Introduction	3		
About ASX Group	3		
Australian Market Characteristics	4		
<u>Feedback</u>			
General Comments	5		
Major Issues	7		
1) Credit risk	7		
2) Liquidity risk and settlement finality	8		
a) Prevention of security delivery failures (fails)	8		
b) Prohibiting rescheduling of securities purchases (rescheduling)	9		
3) Segregation and portability	11		
Other Significant Issues	13		
4) Public interest test	13		
5) FMI risk mitigation practices	13		
6) Market structure and historic price volatility	13		
7) Bank guarantees as CCP collateral	13		
8) Procyclicality and margin rate setting	13		
9) Wrong way risk	14		
10) Capital requirements for general business risk	14		
11) Participant admission	14		
12) Tiered participation requirements	14		
13) FMI communication standards	14		
Conclusion	15		
Attachment A – Responses to CPSS-IOSCO questions			

Introduction

This submission outlines the ASX Group's formal response to the CPSS-IOSCO Consultative report: *Principles for Financial Market Infrastructures*. ASX looks forward to working closely with CPSS and IOSCO, national regulators and market users as the proposal is refined and eventually finalised.

Given the significance of the issues being considered and the diversity of Financial Market Infrastructure (FMI) market structures, governance arrangements and operational procedures, ASX believes that it would be appropriate for another Consultative report to be circulated for comment before the principles are finalised. This will be required in order to account for the important views of market users which, in the Australian context, have only recently been able to turn their attention to the potential impact on Clearing Participants (CPs) based on details from us of the expected impact on ASX's Central Counterparties (CCPs).

Throughout this document ASX has attempted to provide detailed comments wherever possible. In a number of areas we have been unable to provide the level of depth we would like in our response given that the relevant assessment mechanisms have not been released to the public for comment.

We strongly support CPSS-IOSCO releasing another draft of the principles and the relevant assessment mechanism as part of a future consultation process.

About ASX Group

ASX Group is a provider of multi-asset class exchange services providing trading, clearing and settlement services. It operates Australia's main equities and derivatives exchange markets and the post-trade processing services in which transactions executed on those markets are cleared and settled. This is shortly to be extended to alternative market operators trading ASX-listed equities.

ASX currently operates two CCPs – ASX Clear and ASX Clear (Futures). ASX Clear provides CCP services for a range of financial products traded on the ASX market, including cash equities, pooled investment products, warrants, certain interest rate products and equity and commodity-related derivatives. ASX Clear (Futures) provides CCP services for derivatives traded on the ASX24 market (formerly the Sydney Futures Exchange), including futures and options on interest rate, equity, energy and commodity products.

ASX's CCPs are licensed entities regulated by Australia's corporate regulator (ASIC) and central bank (the Reserve Bank of Australia (RBA)). CCPs must comply with the obligations arising from their clearing and settlement facility licences, granted by the Australian Government, including those arising from the Financial Stability Standard for Central Counterparties (FSS) assessed by the RBA.

The ASX Group also has two wholly owned settlement subsidiaries, ASX Settlement and Austraclear. These two settlement facilities provide a delivery versus payment (DvP) settlement service, secure asset holding services as well as a wide network that enables 'straight through processing' to both exchange traded markets (ASX Settlement) and over the counter markets (Austraclear).

ASX Settlement operates the Clearing House Electronic Subregister System (CHESS) which effects the trade settlement for ASX Clear. It does this by transferring the title or legal ownership of the shares while simultaneously facilitating the transfer of money for those shares between participants via their respective banks. CHESS is a Model 3 batch settlement system which reduces settlement exposure and improves operating efficiency by providing multi-lateral netting of settlement positions across all ASX Settlement Participants.

Austraclear is Australia's settlement system and central securities depository (CSD) for the wholesale debt market. Austraclear is a Model 1 Real Time Gross Settlement system which offers a line-by-line, DvP model providing, in real-time, the irrevocable exchange of cash for securities.

ASX is actively looking at extending its CCP services into OTC markets such as equity options and Australian dollar interest rate swaps consistent with the Australian Council of Financial Regulator's discussion paper on Central Clearing of OTC Derivatives in Australia and overseas regulatory changes such as those arising from Dodd-Frank.

Australian Market Characteristics

Many of the issues raised in this submission are generated by the application of the proposed principles to the current legal and regulatory environment and established trading, clearing and settlement structures and procedures in Australia. ASX clearing and settlement facilities operate under the following broad structure:

- ASX CCPs operate in both the cash and on-exchange derivatives market. Derivatives products are
 margined at least daily (intraday where appropriate) while equity cash market margining is scheduled to be
 introduced by the end of 2012.
- All accounts, except the cash equity market, are segregated on a house and client basis. Client accounts are either maintained in an individual or omnibus account structure depending on product category.
- ASX CCPs operate a mixture of gross and net client margining models depending on the type of product cleared. Net margining is used on ASX Clear (Futures) while gross client margining is used for the ASX Clear exchange traded option market. ASX uses this dual approach to reflect the demands of the different user profiles in each market – gross margining where there is a significant proportion of retail clients (ASX Clear) and net margining where clients tend to be institutional or market professionals (ASX Clear (Futures)).
- ASX CCPs operate stress-based additional margin regimes which place additional collateral requirements
 on CPs once stress testing exposures pass predefined limits based on each CCP's variable and fixed
 financial resources. The additional collateral regime on ASX Clear is the Contributions and Additional Cover
 (CAC) while the ASX Clear (Futures) regime is the Additional Initial Margins (AIMS).
- ASX settlement facilities provide DvP processing and typically use a T+3 settlement cycle for equities trades.
- ASX settlement facilities maintain an extremely low failure rate. The monthly initial fail rate on CHESS has
 ranged between 0.06% and 0.1% over the last year. Settlement failures, when they occur, are
 overwhelmingly due to technical or administrative factors often in part caused by timezone challenges for
 offshore holders of Australian stock.

General Comments

The CPSS-IOSCO Principles for FMIs will have a significant impact on the operations of all CCPs worldwide and will have wide-ranging impacts on market participants and their clients. While ASX supports the development of more effective regulatory standards, we have identified that some of the current principles, if implemented, would lead to major unintended consequences for FMIs and therefore the markets which they serve. There is a significant danger that arbitrary increases to FMI standards will have enormous negative impacts on some forms of important market activities that more than offset any perceived benefits from higher FMI standards. In some cases, stated Consultative report objectives may not be attainable, through no fault of the FMI, often due to local jurisdictional issues.

It is important to note that FMIs responded very well to the Global Financial Crisis and as an industry demonstrated robust risk management processes. ASX, however, agrees that this is now an opportune time to revisit the regulatory framework for FMIs, in order to ensure the lessons learnt are applied to future market events. ASX is keen to be part of the review process.

While ASX is supportive of CPSS-IOSCO attempts to bolster systemic risk protections we believe that a holistic assessment needs to be undertaken on the impact of significant principles (e.g. credit risk, liquidity risk and settlement finality). ASX has identified a number of areas where CPSS-IOSCO's attempts to address systemic risk will transfer and/or transform FMIs risk to other important financial institutions. For example, ASX considers that certain requirements in the Consultative report will theoretically help to mitigate liquidity and credit risk but will have the unintended consequence of significantly increasing CP concentration risk which is an equally important consideration, particularly for 'mid-tier' FMIs. In addition, the cost and capital implications for CCPs and market users stemming from some proposed principles could significantly discourage financial market transactions, including transactions designed to hedge the economic exposures held by a variety of market users.

ASX considers that the default scenario for credit risk should remain at the largest participant level. The combination of even one CP defaulting under extreme (price movement) market conditions is already sufficiently improbable that increasing the number of extreme events adds no practical value from a systemic risk perspective but introduces significant market inefficiencies through additional capital costs.

Similarly, ASX considers that the liquidity risk principle should only assess the default of the participant with the largest liquidity exposure and that settlements are able to be rescheduled by the CCP in extreme circumstances. Primarily ASX is concerned that the combination of liquidity risk, settlement finality and default management principles would not allow CSDs and CCPs to permit security delivery failures and prevent the CCP from rescheduling securities purchases in the event of a default. ASX estimates that this principle would require ASX's CCPs to have access to liquidity facilities in the order of several billion Australian dollars. Discussions with other CCPs overseas have confirmed that they face the same problem, in some cases with an even larger financial impact.

The Consultative report also does not stipulate if these principles will effectively set minimum global standards or whether they define industry best practice. ASX considers that the principles and key considerations should be minimum standards that could be increased by domestic regulators where required. While the commentary provides a description of best practice to assist with assessing FMI Compliance against the principles there are no prescriptive requirements. Further guidance on these issues would be appreciated especially given the current variability of application of the current standards.

As FMIs play a critical role in an economy's systemic stability, compliance with CPSS-IOSCO principles is necessary but not sufficient for FMIs to be able to passport into foreign jurisdictions. Where an FMI extends its activities into jurisdictions other than its home jurisdiction, FMIs must also demonstrate compliance with the domestic standards which may be of a higher standard to that required by their home regulator. ASX considers that an annual regulatory compliance assessment is appropriate for all FMIs. This assessment must be transparent and released to the public by the domestic regulator.

Given the significance of the issues being considered and the diversity of FMI market structures, governance arrangements and operational procedures, ASX believes that it would be appropriate for another Consultative report to be circulated for comment before the principles are finalised. This will be required in order to account for the views of market users which, in the Australian context, have only recently been able to turn their attention to the potential impact on CPs based on details from us of the expected impact on ASX's CCPs. Any future consultation should also

include an assessment mechanism such as that used in *Recommendations for Central Counterparties* (November 2004) which would allow FMIs to fully assess the impact of the reforms being considered.

ASX has also been heavily involved in the development of the CCP12 submission to CPSS-IOSCO. We fully support the recommendations contained in the CCP12 submission. Informal discussions with our CCP counterparts overseas have also confirmed that many, especially those that may regard themselves as 'mid tier' national CCPs, believe that they are facing the same key issues.

A comprehensive response to the Consultative report questions is outlined in Attachment A.

Major Issues

ASX has identified several issues following our review of the CPSS-IOSCO Consultative report. In this section we discuss three major issues which will have significant unintended consequences for CCPs and market users – credit risk, a combination of liquidity risk and settlement finality, and segregation and portability.

1. A 'cover two' CP default test for credit risk will impose significant, unnecessary burdens on CCPs in the form of over-capitalisation and difficulties in applying the successful AIMS and CAC stress-based collateral calls. Furthermore, sufficiently robust CCP contingent resources should continue to be recognised by regulators for CCP capital adequacy purposes.

ASX believes the proposed two largest CP default test is too extreme as the simultaneous default of even the single largest CP coinciding with an adverse and extreme market price movement is an exceptionally low probability event, unprecedented in CCP history. ASX considers that the existing largest CP test should be retained as it is sufficiently extreme but plausible.

ASX's view is that the combination of even one CP defaulting under extreme market conditions is already so improbable that increasing the number of extreme events adds no practical value from a systemic risk perspective and only burdens the CCP and the market it serves with potentially significant and expensive capital requirements. We would anticipate that the capital requirement impost on CCPs will increase in stressed market conditions as some CPs seek to increase their exposures to take advantage of potential arbitrage opportunities which often arise in such markets. Furthermore, current CCP stress testing exposures are likely to increase in line with the world economic cycle as risk appetite and equity prices increase.

It is important to note that other critical financial institutions, such as banks, do not need to hold capital equivalent to the forecast losses from such stress tests. Moreover, recent analysis of bank capital adequacy standards in comparison with those for CCPs has highlighted that CCPs hold up to 30 times more capital than banks with identical positions.

The severity of the stress testing assumptions seems too severe when viewed holistically within the CCPs entire risk management framework. By stressing positions each night, stress events are assumed to occur with no warning signs prior to extreme market events to which the CCP would react. In the past however, there have been leading indicators prior to large stress events, similar to the increase in price volatility experienced prior to the 1987 stock market crash. Indicators such as these are typically used by clearing houses to engage other risk management options such as increasing margin rates or calling additional margin from specific counterparties of concern. Indeed, although Lehmans were not a CP of either of ASX's CCPs, the market volatility in the months prior to Lehmans' collapse was identified by the CCPs' monitoring activities and resulted in higher margin rates by the time of the Lehman bankruptcy. CCPs often receive advanced warnings of counterparty weakness through existing CCP risk protections and are able to lower risk limits to such counterparties. Reliance on robust monitoring and margining, perhaps targeted at a specific counterparty, is a much more efficient means of handling such risks rather than holding substantial and largely unnecessary non defaulter fixed resources at the CCP.

Any potential increase to the credit event severity of stress tests also seems to be at odds with wider efforts by regulators to strengthen CCPs' counterparties and thereby reduce the probability of a default. This is particularly true of increased capital requirements of major banking participants (e.g. Basel III).

There are many other tools that CCPs use to mitigate against credit risk which have not been recognised by CPSS-IOSCO. ASX believes that domestic regulators should have the ability to allow CCPs to include contingent resources against CCP capital stress testing results, subject to the strength of the commitment (e.g. Rulebook power and credit worthiness of those obligated to pay). Contingent capital is widely used as a risk mitigation tool among CCPs and as such should be recognised for the purposes of assessing CCP credit risk. By disregarding this important consideration to CCP financial resources, regulators may inadvertently lead CCPs to expunge these protections from their Rulebook.

ASX CCPs, unlike many in the industry, also operate a stress-based additional collateral regime which places requirements on participants once stress testing exposures pass predefined limits based on the size of the financial resources of the CCP and counterparty standing of the CP. ASX requires CPs to entirely collateralise any exposures which exceed these limits (lower rated counterparties need to fully collateralise positions at lower thresholds). This provides additional protection to CCPs and we consider that national regulators should also have the ability to take into account such processes in an assessment of a CCP's overall stress testing arrangements.

An unintended consequence of moving to a two largest CP default scenario is that existing stress-based additional margin regimes will not be able to operate effectively. This arises because a combination of two CP positions rather than one will need to be used to determine the magnitude of any additional stress-based additional margin. Essentially a single CP will not have any control or visibility over the positions of other CPs and therefore could be called for additional margin based on exposures which they cannot control or forecast. An additional issue for CCPs under a two CP default situation will be how to transparently apportion any stress-based additional collateral call among the CPs.

2. ASX is strongly of the view that the prescribed liquidity stress test should be set at the default of the single largest CP. Furthermore, the principles should clearly state that delivery failures are an inevitable part of securities settlement and that CCPs should be permitted to re-schedule settlements as part of standard ongoing operations and in the event of a CP default.

Many of the arguments previously made on the appropriate number of defaulters for credit risk stress testing equally apply to the default scenarios for liquidity risk. ASX is strongly of the view that liquidity stress testing should only assess the default of the participant with the largest liquidity exposure, providing that settlements are able to be rescheduled if required.

As currently drafted, ASX is concerned that a combination of the-liquidity-risk, settlement finality and default management-principles do not allow the CSD/CCP to permit security delivery failures and prevent the CCP from rescheduling securities purchases in the event of a default. ASX calculates that this principle would require CCPs to have access to liquidity facilities in the order of several billion Australian dollars. Informal discussions with CPSS-IOSCO editors have suggested that the settlement finality principle is aimed at ensuring that CSDs/SSSs complete daily settlement on the same day as ownership of the security changes, thereby accommodating a Model 2 settlement process.

However, it is unclear whether the glossary definition of 'value date' refers to the scheduled or actual settlement date of the security. If value date refers to the scheduled rather than actual settlement date, fails and rescheduling are effectively prohibited and ASX believes that the unintended consequences of such a move would negate any perceived benefits and in some cases may not be practically attainable without explicit central bank liquidity support. Extending the scenario to the default of the two largest CPs significantly exacerbates these problems. The impact of the proposed principles and rationale for ASX's suggested modifications to the principles are explored further below.

a) Prevention of security delivery failures (fails)

<u>Impractical in some cases</u>: Guaranteeing settlement on the scheduled settlement date will require the CCP or CSD to buy in stock in advance of a likely fail. This is impractical, if not unachievable, in certain circumstances, not least as FMIs may not be able to purchase an illiquid security prior to a failed settlement. Such an arrangement would be a significant administrative undertaking especially where there are a substantial number of often retail clients.

<u>Alternative approaches ensure that fail rates remain low</u>: Despite the geographical and time-zone challenges posed to offshore movements of Australian equities, ASX maintains a very low settlement failure rate and our experience is that the incidence of FMI settlement failure can overwhelmingly be attributed to administrative delays overseas. The monthly initial fail rate on CHESS has ranged between 0.06% and 0.1% over the last year.

ASX believes that fails are an unavoidable characteristic of settlement systems and that, whilst an FMI should make every effort to minimise such occurrences, the principles should not seek to prohibit delivery fails.

b) Prohibiting rescheduling of securities purchases (rescheduling)

Assists CCP default management: ASX considers that FMI default management resolution should be determined by the circumstances surrounding the specific default and FMIs should have a range of alternative responses at their disposal. This includes the ability to reschedule for a period of time where the size of the default is so significant that either to attempt to inject liquidity on the scheduled settlement date would create wider systemic risk concerns or such an injection is not possible given prevailing market conditions. CCPs should advise market users of these potential outcomes so that they have the capability to make appropriate changes to their own processes to accommodate such CCP actions e.g. similarly deferring payments to clients.

Apparent ability of a CCP to have sufficient liquidity may be illusory. The default of the largest participant (or even two largest participants) typically represents the default of a major bank with market-wide wholesale and retail exposures that would likely cause significant wider market paralysis. In such circumstances, many other factors are likely to negatively impact on the operation of banking payment and settlement systems and wider market liquidity, potentially negating the arrangements put in place to meet the substantial liquidity requirement. CCPs may have no choice but to reschedule settlements until market conditions stabilise, thereby preventing the CCP meeting the underlying objective of the Principle yet incurring significant financial cost in acquiring the ultimately unavailable liquidity facilities.

Creates liquidity pressures on banks

In practice, unless central bank liquidity is forthcoming, CCPs will need to secure substantial commercial bank lines of liquidity, probably at significant cost to the market. Drawing upon such lines following a default, especially given the potential size, will create additional liquidity pressures on banks at a time of extreme market stress.

Impact creates significant unintended consequences

If FMIs do not have the ability to reschedule settlements and defer payments in the most extreme circumstances then the following funding considerations and impacts under the liquidity risk proposal would be expected to occur.

Funding scale

The liquidity risk proposal, regardless of the default scenario selected, will impose considerable funding challenges for CCPs and will probably amount to many billions of dollars. ASX has established that a large component of the proposed CCP liquidity requirement for CCPs will be generated at option/futures contract expiry periods by CPs' overall low risk arbitrage activity because CCPs are only counterparty to one leg of the arbitrage transaction.

The resulting, potentially significant, cost imposed on CCPs will need to be recovered from CPs through a number of possible channels:

- CCPs could require significant additional paid in resources and / or a committed liquidity line in order to
 meet the liquidity requirements. However, ASX considers that these facilities are unlikely to be available for
 CCPs in the required magnitude.
- Fundamental changes may be required to initial margins, collateral management and limits placed on CP
 exposure levels to ensure CCP compliance with the liquidity requirement. Specifically cash initial margins
 are likely to increase significantly for liquidity rather than credit risk purposes and more restrictive limits
 might need to be placed on the size of CP positions, particularly around major contract expiries.

Funding certainty

As highlighted above, the actual default of a major CP would probably see committed or uncommitted funding lines becoming unavailable given the major impact the default itself would have on financial markets. In this situation, a dedicated unsecured Central Bank liquidity line would be the only facility which is sufficiently large and accessible during periods of such financial instability to ensure compliance with the Principles. ASX considers that domestic regulators in jurisdictions subject to the CPSS-IOSCO standards must be willing to provide such facilities before adoption of the proposed liquidity standard should be considered. We are, however, aware that such commitment by central banks is not straightforward as the availability of such facilities could create moral hazard, whereby a CCP

would fail to maintain robust risk management standards in the knowledge that it ultimately has access to a central bank liquidity facility in a worst case event.

Funding inefficiency

In Australia, significant liquidity requirements based on the current CPSS-IOSCO proposal will typically be associated with the unwinding of index arbitrage transactions. This will be considerable during the T + 3 settlement cycle associated with the substantial buys/sells of the underlying stock at the expiry of index futures. Requiring CCPs to hold significant resources at all times to cover quarterly contract expiries is not an efficient method of addressing liquidity risk. One alternative may be to adopt a user pays approach and require the CP to provide the liquidity in the form of cash margin. However the size of the calls – potentially several billion dollars for certain CPs – would make such activity uneconomic and generate wider market pricing distortions. The current proposal as a result will impose significant costs on all market participants, particularly around heavily traded index contract expiries when liquidity risk tends to create significant three day exposures.

CCP impact:

The combination of the liquidity, default management and settlement finality proposals, even at the single largest participant default level, will have a major impact on CCPs. Although these requirements are likely to be passed onto CPs and their clients, this proposal will have the following specific CCP impacts:

- Initial margin rates, particularly those for highly liquid contracts (eg index futures), would need to rise considerably to reflect not only CCP credit risk mitigation but also to counter increased liquidity needs.
- CCPs will need to curtail CP allowable exposure limits in order to limit the creation of large liquidity risk positions. Total collateralisation (e.g. \$1 of collateral for every \$1 of CP exposure) may need to be imposed at much lower levels in order to limit CCP liquidity risk exposures.
- Paid in CCP default fund contributions will need to be reconsidered and may need to be increased significantly.
- CCPs will have to carefully reassess plans to clear OTC derivatives given impact this activity will have on CCP liquidity requirements. ASX encourages CPSS-IOSCO to consider future OTC market regulatory developments when developing changes to this proposal.
- CCPs are likely to face increased counterparty and business risk concentrations due to the impact this
 proposal will have on CPs.

Particularly from the perspective of a 'mid tier' CCP, the liquidity and settlement finality principles have significant implications that may be exacerbated by a resulting increase in CP concentration risk. The smaller relative size of a domestic 'mid tier' financial market, compared to larger financial centres, generally leads to the presence of a relatively smaller number of large participants active in a market typically with less financial instruments. Given this pre-existing situation the liquidity risk and settlement finality principles will typically have a greater impact on 'mid tier' FMIs as the largest (or two largest) participants are more likely to have a larger share of total clearing activity. The cost implications of the liquidity and settlement finality proposals will also need to met by a relatively smaller number of CPs which, as a result, disproportionately increases the cost of being a CP in a 'mid tier' market relative to larger financial centres. Higher average costs will make the decision to become (or remain as) a CP less economical in 'mid tier' markets, increasing CCP concentration risk.

The liquidity risk and settlement finality principles may also cause greater practical implications for Model 3 batch settlement systems (such as CHESS) compared with Model 2 settlement systems. Intraday batch settlement systems potentially have more urgent intraday liquidity pressures for a CCP to inject funds to avoid prolonged delays to the batch settlement.

Impact on market users:

If the current CPSS-IOSCO proposal is implemented there will be a significant impact on CPs and their clients, primarily through changes to market liquidity and efficiency. Many CCPs are likely to be unable to find the liquidity required and will need to reduce liquidity exposures by raising initial margins (which may at times reach unaffordable levels), lowering CP exposure limits and / or requiring additional paid in resources. This will significantly increase CP

expenses which are likely to drive some CPs away from the CCP and so increase CP industry concentration with its systemic risk implications.

CP (and client) arbitrage activity could be significantly affected as CCPs generally only have oversight of one part of the trading leg. As CCPs will need to pass on these regulatory costs, CPs (and their clients) may elect to reduce their arbitrage and hedging activity, increasing both market inefficiencies and the risk in the financial system.

There are likely to be a number of other CP and client impacts:

- Some participants may reduce trading volume and consider clearing trades bilaterally;
- Stress-test based collateral calls are likely to occur with greater frequency; and
- The anticipated decline in market activity will further increase bid/ask spreads, imposing higher trading costs to the whole market.

ASX is therefore strongly of the view that liquidity stress testing should only consider the default of the participant with the largest liquidity exposure and provide for settlements to be rescheduled in extreme default circumstances.

3. ASX welcomes the recognition of the challenges arising from domestic insolvency laws when executing CCP default management plans. Practical obstacles mean that cash market CCP exposures should be explicitly excluded from the portability requirements. Moves to require gross client margining should be carefully considered.

While ASX broadly supports the objectives of the portability proposal and recognises its potential systemic benefits, Australian insolvency law (and potentially insolvency law in other jurisdictions) currently prohibits timely portability. In order to implement this proposal an appropriate legal framework will first need to be put in place. ASX welcomes the CPSS-IOSCO principles focus on domestic regulators to make the appropriate changes to national insolvency law, in particular, reflecting the important role CCPs play in preserving systemic stability, by such as putting the rights of a CCP in a default situation ahead of an administrator or receiver appointed to the defaulter.

Notwithstanding this key legal impediment, other obstacles exist. Where CPs hold a large number of client positions, portability may not be possible on a timely basis given the large number of transfer requirements which must be met. In the event of a CP default, the following administrative requirements, at a minimum, will need to be met by a client's new CP:

- Formalising new client agreements;
- Complying with 'know your client' and anti-money laundering requirements; and
- Confirming client contact and banking details.

CCPs will also need to meet a number of requirements which include (but are not limited to):

- Securing the assistance of the defaulter or administrator/liquidator when transferring individual accounts.
- Executing the transfer of a significant number of client accounts to one or many recipient participants;
- Contacting non defaulting CPs to gauge interest in respect of accepting client positions;
- Contacting and liaising with defaulter's clients; and
- Confirming clients' secondary clearing relationships.

Undertaking these operational tasks is a time-consuming process and may only be appropriate where the CCP is not exposed to additional risks, where for example market volatility is low or the position is significantly over-collateralised to permit the CCP time to execute these, at times complex, steps.

Portability in the cash market therefore would be impractical given the large numbers of retail clients that participate in this market. The Principles, therefore, should exclude unsettled cash market transactions from the portability

requirement. Even for exchange-traded derivatives the practicalities of transfer make portability difficult, especially where there is a significant retail portion of the portfolio.

While systemic risk benefits could be achieved by porting positions there will be other system wide costs which need to be considered. Even if the appropriate legal framework is established and practical difficulties overcome, FMIs would still need to carefully consider the benefits of adopting gross margining and other measures required to remove operational impediments to portability.

ASX believes that gross margining with collateral held at the CCP is the only method that could provide the required certainty for portability arrangements. While client positions may be able to be ported to one other CP under a client net margining model, it is unlikely that a single CP will be able to take on all clients positions in the event of a default. This will be especially significant where the defaulting CP is a relatively large participant.

CP futures clearing business models in many jurisdictions rely heavily on the interest income generated through the use of client net margining models. Under this margining approach, clients are margined by the CP based on their individual positions while the CP is margined based on the net portfolio risk of the total client positions it clears, allowing the CP to generate interest income from the surplus cash. However, removing this source of interest income for CPs is likely to reduce CP industry profitability and could lead to industry concentration and higher client clearing fees. This increased concentration risk will be a key systemic risk concern for CCPs.

Other Significant Issues

4. FMIs cannot support 'relevant public interests at all times'.

The Governance proposal cites that FMI objectives should explicitly support 'relevant public interests'. While we broadly support the intent of the Governance proposal we do not believe that FMI objectives should be explicitly extended to supporting the public interest.

ASX recognises that often CCP and public interest objectives are naturally aligned, not least because of the reputational risk to the CCP, but note that in many jurisdictions directors' duties will be enshrined in legislation and, at times, may run contrary to these objectives. In addition, 'public interest' is neither easily defined nor a homogeneous concept and in most cases there will be inconsistencies between the interests of different sections of the community, making the public interest goal unattainable.

5. FMIs should focus on their own risk mitigation practices.

While ASX considers that FMIs should provide information to CPs to enable them to assess the risks they face, a FMI's primary responsibility should be to focus on their own risk mitigation. The responsibility for undertaking client risk analysis should remain the responsibility of market participants and it is unacceptable for FMIs to perform risk analysis on behalf of clients. Doing so could create significant legal risks in the event of a client default and FMIs should focus on their core activities. Nevertheless, ASX recognises that CPs should attain minimum risk management capabilities as part of their CCP participantship.

<u>6. CCPs must take account of evolving market structure when choosing appropriate historic periods to determine the size of an extreme market event when determining credit and liquidity risk stress test scenarios.</u>

Requiring CCPs to take into account peak historical volatility over the entire life of a product may not be appropriate in all instances. Over time, financial markets for a particular product will evolve and the associated volatility characteristics would change accordingly. For instance, volatility often falls as market liquidity rises and financial markets mature. ASX considers that CCPs and their domestic regulators will be in the best position to consider whether highest observed volatility should in fact be included in stress testing scenarios. However, as a general guide, ASX believes that this look back period should be set at a maximum of 20 years when establishing stress testing parameters.

7. High quality bank guarantees, within concentration limits, should remain an acceptable form of CCP collateral.

High quality bank guarantees are an important and cost efficient form of collateral used by many CPs. Such guarantees have historically proven reliable even during stressed market conditions and should continue to be accepted as a form of collateral without the imposition of unnecessary conditions. Preventing the use of high quality bank guarantees will increase the cost of CCP clearing and may result in CCP collateral concentration. ASX considers that it would be prudent for CPSS-IOSCO to impose requirements on CCPs to set appropriate minimum credit ratings for bank guarantees and CCP concentration risk limits.

8. Eliminating procyclicality from CCP margin rate setting will be difficult to achieve.

ASX broadly supports CPSS-IOSCO's intention that CCPs should adopt forward-looking, relatively conservative and stable margin requirements that are specifically designed to avoid the need for destabilising, procyclical changes. While procyclicality is a factor taken into consideration by CCPs, at times other factors may need to prevail. ASX considers that CCPs should not have this over-riding requirement imposed on them as their solvency and liquidity is

paramount in stressed market conditions. It is important that CCPs should have the ability to modify margin requirements in respect to changing market conditions, even if this action may be procyclical.

9. CCP efforts to limit wrong way risk may be limited.

Several practical obstacles exist to a CCP's efforts to limit wrong way risk. Firstly, it is difficult for CCPs to identify general wrong way risk in the first instance, let alone accurately margin any wrong way risk positions. In addition, it is often impractical to address specific wrong way risk in some markets e.g. the cash equity market especially where client trades in the equity of their CP creates wrong way risk for the CCP.

ASX believes that it is it is important that exposures are accurately reflected in stress testing models and that wrong way risk should be mitigated through monitoring, limits and where necessary additional collateral. In some cases, such as house account lodgements of related collateral, prohibition is feasible but a 'one size fits all' approach is unrealistic.

10. Capital requirements for general business risks should be risk reflective.

The proposed capital requirement for general business risk is not risk related and represents a crude approximation for the business risks of CCPs. In order to more accurately assess this risk, ASX considers it appropriate for domestic regulators to base business risk capital requirements that are generated by approved risk-based internal models. Such an approach would encourage proper understanding of risks and would also take into account the related risks across multi-faceted exchange groups.

11. FMIs must be able to reject admission applications where there are financial stability, market efficiency or equivalent regulatory oversight concerns.

ASX accepts the principle that FMIs should allow fair and open access to their services. However, FMIs should have the ultimate discretion to exercise reasonable judgement in relation to who they admit. A firm which meets the admission criteria should be able to be denied admission where there are financial stability, market efficiency or equivalent regulatory oversight concerns. Whilst disclosure of the reasons for rejection to the applicant is appropriate, public disclosure of the reason for an unforeseen exclusion would be inappropriate in this situation because such a decision may be based on confidential information. Where there is a dispute, disclosing the reason for non-admission may open an FMI to legal action (e.g. defamation).

12. Further clarity is required on Tiered participation requirements.

ASX is seeking further clarity on Principle 19 – Tiered participation arrangements. We have found the current proposal too vague to be able to comment in any depth. ASX considers that FMIs should have an opportunity to comment on this proposal at a later date and would welcome bilateral contact with CPSS-IOSCO to further understand this Principle.

13. Customer demand must be the primary factor driving FMI communication standards.

ASX currently meets the requirements contained in Principle 22 with many of our FMI systems and understand that such protocols are often an essential part of the service provided to clients. However, we consider that customer demand should be the primary factor driving FMI communication standards and believe customers are in the best position to articulate the functionality they require from FMI systems. We also believe that there should be no requirement to convert existing systems to such protocols.

Conclusion

ASX would once again like to thank the CPSS and IOSCO for the opportunity to comment on this consultation document. We would be happy to discuss any of these issues further and are keen to maintain ongoing contact to assist in any way to explain the impact of the proposed CPSS-IOSCO principles on our market. If you have any comments or questions, please contact Joshua Everson at joshua.everson@asx.com.au or phone: +612 9227 0233.

Attachment A - Responses to CPSS-IOSCO questions

Credit risk

1) What are the pros and cons of establishing for credit risk (1) a "cover one" minimum requirement for all CCPs; (2) a "cover two" minimum requirement for all CCPs; and (3) either a "cover one" or a "cover two" minimum requirement for a particular CCP, depending upon on the risk and other characteristics of the particular products it clears, the markets it serves and the number and type of participants it has?

ASX considers that there is an excessive focus on the number of defaulting participant for stress testing and we believe requirements should be more holistic. A simplistic requirement such as this, while having some benefits, may create an illusory confidence that a CCP can withstand the modelled event. In practice numerous other factors will determine a CCP's ability to withstand a credit event, including the accompanying prices moves.

Test	Pros	Cons
"cover one" minimum requirement	Maintains a proven standard.	Does not take into account the counterparty standing of the CP which, given the size of the position, is likely to be very high.
		Creates the mispricing of risk in the market for third party clearing and/or CCP services.
		Event is so extreme as to never have happened.
		When combined with the likelihood of a price event may be seen as too extreme.
"cover two" minimum requirement	This is theoretically possible but is a more severe event requiring greater capitalisation of CCPs.	This is an extremely unrealistic scenario and too extreme given that even the single largest participant default has not occurred.
		This is an arbitrary increase and no justification has been provided.
		The impact is potentially very severe for the whole market. It will require extra capital, increase costs and have a negative impact on stress based additional margin calls for little or no benefit.
"cover one" or a "cover two" minimum requirement, depending upon the particular products it	This will apparently tailor capital requirements where it is required.	This will create an uneven competitive playing field.
clears, the markets it serves and the number and type of participants it has		It is unclear which factors should determine the choice between the largest or two largest default choice.
		By definition the largest default would therefore be the minimum standard.

2) What potential risk, competitiveness or other concerns might arise if certain CCPs that clear certain products would be subject to a "cover one" minimum requirement, while certain other CCPs that clear certain other products would be subject to a "cover two" minimum requirement? How and to what extent could these concerns be addressed?

ASX does not support a two tiered approach to credit risk assessment given the strong linkages across product markets and the market fragmentation that such a proposal will establish. Products subject to the cover two requirement are likely to become less attractive markets to market users and it is envisaged that these contracts will also become less liquid as trading activity shifts to alternative products subject to a cover one test. There should not be an opportunity for CPs to arbitrage between CCPs based on risk standards.

Capital is a major cost to CCPs and those carrying excessive capital will be handicapped competitively in terms of the need to justify returns on this capital and securing, in some cases, extra capital from users. The impact will be very severe on those CCPs with concentrated markets and it is unclear to ASX how this imbalance can be addressed. Different risks should be addressed through different risk management and stress test assumptions rather than the number of potential defaulters. ASX typically applies higher margin rates and/or higher stress test levels to more volatile stocks or portfolios.

3) Which risk and other characteristics of the products cleared by a CCP are relevant in weighing the pros and cons of a "cover one" versus a "cover two" minimum credit requirement for a CCP? In particular, to what extent are any or all of the following product and market characteristics relevant: OTC versus exchange-traded; mandatory versus voluntary clearing; "cash" versus "derivative"; the duration, volatility and degree of leverage; the number and type of CCP participants; the degree of market concentration; and the availability and reliability of prices from continuous, transparent and liquid markets?

We do not believe that a definitive list of product and market characteristics can be established to determine if a cover one or cover two credit requirement is appropriate. It will be important to standardise credit default assumptions across jurisdictions.

If the objective is to have an unambiguous standard of credit event then these factors are not relevant and the same standard should prevail in all jurisdictions. Market concentration and inefficiencies will be the major unintended consequences resulting from the capital implications associated with the current proposal.

Liquidity risk

4) What are the pros and cons of establishing for liquidity risk (1) a "cover one" minimum requirement for all FMIs; (2) a "cover two" minimum requirement for all FMIs; and (3) either a "cover one" or a "cover two" minimum requirement for a particular FMI, depending on the risk and other characteristics of the particular payment obligations it settles, the products it clears, the markets it serves and the number and type of participants it has?

	Pros	Cons
a "cover one" minimum	This test will have the lowest impact	The current liquidity risk test is
requirement for all FMIs	on market efficiency and liquidity.	illusory in nature and needs to be
		fundamentally refined.
a "cover two" minimum	None	This test is too extreme and
requirement for all FMIs		measures an event which is
		infeasible in practice. The magnitude
		of the impact of this test will
		fundamentally impact many financial
		markets.
		The current liquidity risk test needs
		to be fundamentally refined.
a "cover one" or a "cover two"	None	Such a proposal would not be
minimum requirement for a		workable as it fails to set a

particular FMI, depending on the	consistent benchmark across
risk and other characteristics of	jurisdictions. Assuming that national
the particular payment obligations	regulators would be responsible for
it settles, the products it clears,	determining which test is applied, it
the markets it serves and the	is unlikely that any regulator would
number and type of participants it	place their domestic industry at a
has?	competitive disadvantage to another.

5) What potential risk, competitiveness or other concerns might arise if certain FMIs that settle certain payment obligations or that clear certain products would be subject to a "cover one" minimum requirement, while certain other FMIs that settle certain other payment obligations or that clear certain other products would be subject to a "cover two" minimum requirement? How and to what extent could these concerns be addressed?

The cover one or two requirement should not be determined by the types of products that are settled. ASX considers that the majority of failed settlement incidents can be attributed to technical or administrative errors and not specific products. Adopting this option is likely to lead to different requirements across jurisdictions given the significantly different characteristics that exist across various markets.

Applying such a distinction to requirements is likely to raise the risk that clearing activity may move to CCPs which maintain lower risks standards.

6) Which risk and other characteristics of the payment obligations settled by a payment system, CSD or SSS are relevant in weighing the pros and cons of a "cover one" versus a "cover two" minimum liquidity requirement for such an FMI?

ASX can not identify any risk or other characteristics which would suggest that a cover one or cover two minimum liquidity requirement is optimal. The liquidity risk requirement should only be considered as a requirement provided that FMIs are able to reschedule settlements when required. The default of the largest participant position would be a sufficiently extreme test were fails and re-scheduled settlements to be permitted.

7) Which risk and other characteristics of the products cleared by a CCP are relevant in weighing the pros and cons of a "cover one" versus a "cover two" minimum liquidity requirement for a CCP? In particular, to what extent are any or all of the following risk and other characteristics of the payment obligations settled or the products cleared by an FMI relevant: OTC versus exchange-traded; mandatory versus voluntary clearing; "cash" versus "derivative"; the duration, volatility and degree of leverage; the number and type of CCP participants; the degree of market concentration; and the availability and reliability of prices from continuous, transparent and liquid markets?

ASX does not believe that it is appropriate to have multiple risk characteristics associated with any liquidity test requirement. We consider that changes to the Liquidity risk and Settlement Finality requirements will need to be made.

Segregation and Portability

8) What are the different models and approaches to establishing segregation and portability? What are their pros and cons respectively, for example in terms of efficiency and level of protection that can be achieved?

CP account segregation will either be coupled with gross or net client margining as determined by CCPs. ASX considers that timely portability can only be achieved where the legal framework allows portability, gross client margining is in place, all client collateral is lodged with the CCP and the number of clients makes timely portability practically feasible.

Account	Margining approach	Pros	Cons
House	Net	House positions are never ported and are only closed out in the event of the CP's default.	None

Account	Margining approach	Pros	Cons
Individual Client	Gross	Positions are easier to port under the appropriate legal framework (i.e. assuming customer consent is not required). In theory has better client protection.	If gross margin is held at the CCP, likely to reduce CP revenues and increase CP concentration risk.
Client Omnibus	Net	Will not impact on CP business models, and will not increase CP concentration risk or impact CP clearing costs.	Less margin will be held at the CCP and portability will be conditional on transfers not increasing risk beyond available collateral. Clients are more clearly at risk against other clients of the same CP.

9) In view of the different options and models that may exist, is there any one option or model in particular that could usefully serve as a minimum requirement?

CCPs have a very diverse set of operational arrangements and achieving a minimum requirement will be difficult.

While ASX supports the objective of portability, the impact on CPs and their clients could outweigh the benefits of being able to port positions. Portability to one or more CPs can only be achieved with a high degree of certainity where the appropriate legal framework is in place, gross client margining is used and all client collateral is lodged with the CCP. It is unlikely that these conditions exist in any jurisdiction at present and establishing these conditions would lead to an increase in CP concentration risk, a loss of market efficiency and upward pressure on clearing costs. ASX considers that the trade off between enhanced default management capabilities and higher CP concentration risks should be determined by CCPs in consultation with their regulators.

Achieving the required conditions for timely portability would significantly change the operating environment (and business models) of many CPs. Mandating gross margining would be required to achieve this objective but this would have limitations as doing so would remove an important source of revenue for many CPs.

10) Would it is be possible to identify a specific approach to segregation and portability that could be defined as best practice?

See 9) above.

11) Would it be helpful to distinguish between different types of customers, such as by the degree of tiering or by domestic or cross-border activity? Please explain.

Complex structures sometimes make it difficult to ascertain whether an account is house or client, particularly where the clients are offshore. However, as previously stated, ASX considers that CPSS-IOSCO should clarify their intention under the Tiered participation arrangements principle. Based on the information provided, ASX is unable to determine how regulators propose to utilise user differentiation to create financial stability benefits. Differentiating requirements by customer type is likely to lead to unnecessarily complex requirements for CCPs and market participants.

12) Would it be helpful to distinguish between different types of products? If so, please explain why and how.

Many CCPs maintain different segregation arrangements depending on whether clients tend to be wholesale or retail. In order to achieve client portability with a high degree of certainty the appropriate legal regime and gross client

margining must be in place and all client collateral lodged with the CCP. The segregation and margining approach used should be determined by CCPs in consultation with their domestic regulator and market users.

13) What are the existing legal constraints that limit segregation and portability?

Australian insolvency law currently makes portability virtually unattainable and strong retail investor protections also inhibit portability. In order to address these issues the optimal approach may be to allow CCPs actively managing a default to receive a domestic carve out from impinging legal provisions.

The legal considerations include (but are not limited to):

- The rights of a CCP in a default situation where CCP rights will not necessarily be ahead of the administrator or receiver appointed to the defaulter.
- The formulation of new client agreements; and
- Compliance with 'know your client' and anti-money laundering requirements.

Practical considerations will include (but are not limited to):

- Securing the assistance of the defaulter or administrator/liquidator when transferring individual accounts.
- Executing the transfer of a significant number of client accounts to one or many recipient participants;
- Contacting non defaulting CPs to gauge interest in respect of accepting client positions;
- Contacting and liaising with defaulter's clients; and
- Confirming clients' secondary clearing relationships.

General business risk

14) What are the pros and cons of establishing a quantitative and/or a qualitative requirement for the amount of liquid net assets funded by equity that an FMI should hold to cover general business risk?

ASX supports the need to maintain capital against business risk, but the method should be sufficiently flexible to accommodate appropriate bespoke risk measures that, where necessary, reflect joint risks across the exchange group.

Rule type	Pros	Cons
Quantitative	A consistent requirement can be established for all FMIs. Such rules are standard corporate	The requirement may be determined by a factor which is not a good predictor of CCP general business risk.
	practice in the finance industry.	Difficult to quantify business risks that coincide with defaults.
		Needs to reflect corporate group structures in which the CCP sits.
Qualitative	Regulators can apply a general business risk requirement according to specific FMI risk exposures.	Differences are likely to form between regulators in relation to regulators' risk appetites and interpretation of standards.
	Such rules are standard corporate practice, regardless of industry.	Risk requirements may not be transparent to other CCPs and market users.
	Allows more flexibility to account for different FMI business models.	Needs to reflect corporate group structures in which the CCP sits.

15) If a quantitative requirement is established, what are the pros and cons of setting this amount equal to six, nine or twelve months of operating expenses?

Setting quantitative FMI operating cost requirements will ensure that the capital requirement is transparent and equivalent across all CCPs. However, this requirement is crude and will not be risked based and therefore will not be able to accurately estimate the amount of required capital.

ASX considers that regulators should be able to approve FMI capital requirements which are determined by approved internal models.

Access and Interoperability

16) The CPSS and IOSCO specifically request comment on challenges associated with establishing links between FMIs.

The primary consideration for FMIs and regulators alike is how to mitigate any possible transmission of systemic risk especially across borders. There are a number of challenges in developing a link including (but not limited to):

- Ensuring robust operational procedures on the links' activities.
- Understanding the different legal requirements in each jurisdiction and the likely legal interpretations of courts and regulators;
- Establishing a reasonable amount of additional collateral to be posted between linked CCPs;
- Assessing the default probability and impact of putting in place adequate default fund contributions;
- Choosing an appropriate jurisdiction to hold collateral;
- Accurately forecasting demand and capacity requirements;
- Maintaining an awareness of the other CCP's bilateral links and the risks they pose; and
- Time zone and calendar challenges.