

## Central Counterparty Recovery

Consultation on Exposure Draft operating rules to implement loss allocation and replenishment tools for clearing participant default and non- default loss



#### Invitation to comment

Contacts ASX is seeking submissions on the exposure draft operating rule amendments canvassed in this paper by Friday 22 May 2015. Submissions should be sent to:

E janine.ryan@asx.com.au

Office of General Counsel ASX Limited 20 Bridge Street Sydney NSW 2000

Attention: Janine Ryan, General Manager, Legal

ASX prefers to receive submissions in electronic form Submissions not marked as 'confidential' will be made publicly available on ASX's website

If you would like your submission, or any part of it, to be treated as 'confidential', please indicate this clearly in your submission. ASX is available to meet with interested parties for bilateral discussions.

#### Contacts

For general enquiries, please contact:

Janine Ryan – General Manager, Legal T +61 2 9227 0497

E janine.ryan@asx.com.au

Brad McCosker – Senior Advisor, Clearing Risk Policy T +61 2 9227 0147 E bradley.mccosker@asx.com.au

Media enquiries, please contact:

Matthew Gibbs, General Manager, Media and Communications T +61 2 9227 0218 E matthew.gibbs@asx.com.au

### **CONTENTS**

Introduction	3
Non-default loss allocation	7
Revised Operating Rules	9
Next steps	9
Schedule 1: ASX Clear default loss allocation and replenishment tools	10
Schedule 2: ASX Clear (Futures) default loss allocation and replenishment tools	13
Schedule 3: Substantive feedback and ASX responses	17
Schedule 4: Default period and resignation timeline example	38
Schedule 5: Rescaling timeline example	39



### 1. Introduction

### 1.1. Purpose of this consultation paper

In October 2014, ASX released a Consultation Paper on Central Counterparty Recovery seeking comment on proposals to implement new uncovered loss allocation and replenishment tools for clearing participant default to comply with new domestic and international regulatory requirements. A copy of the October Consultation Paper can be found at <a href="http://www.asx.com.au/documents/public-consultations/Central Counterparty Recovery Consultation Paper.PDF">http://www.asx.com.au/documents/public-consultations/Central Counterparty Recovery Consultation Paper.PDF</a>

The purpose of this paper is to seek comments on the Exposure Draft amendments to the Operating Rules of the ASX CCPs to implement:

- default loss allocation and replenishment rules for ASX's CCPs, after taking into account feedback received in response to the October 2014 Consultation Paper. For further detail, see Section 1.2 and Schedules 1 to 3.
- rules for allocation of general business losses ("non-default losses") incurred by ASX's CCPs, as required by domestic and international regulatory standards. For further detail, see Section 2.

The Exposure Draft Rules are available as follows:

- ASX Recovery Rulebook the Recovery Rulebook will operate as a stand-alone rulebook which will apply to both ASX CCPs – <a href="http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-rulebook.pdf">http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-rulebook.pdf</a>
- ASX Recovery Handbook the Recovery Handbook contains the procedures applicable to the Recovery Rulebook and will apply to both ASX CCPs - <a href="http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-handbook.pdf">http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-handbook.pdf</a>
- consequential and related amendment to the ASX Clear Operating Rules- <a href="http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-or-consultation.pdf">http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-or-consultation.pdf</a>
- consequential and related amendments to the ASX Clear (Futures) Operating Rules http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-futures-consultation.pdf

ASX seeks comments on the Exposure Draft Rules by 22 May 2015. ASX welcomes the opportunity to discuss the Exposure Draft Rules with interested parties.

#### 1.2. Response to feedback on loss allocation and replenishment tools for clearing participant default

ASX thanks all those who shared their views and expertise during the October consultation process. ASX received a total of 13 formal submissions in response to the October Consultation Paper. ASX has published the non-confidential submissions at <a href="http://www.asx.com.au/services/clearing/ccp-recovery-and-resolution.htm">http://www.asx.com.au/services/clearing/ccp-recovery-and-resolution.htm</a>

A high level summary of unattributed feedback in relation to specific recovery and replenishment tools, and ASX's response, is set out in Schedule 3. While there was consistent feedback in relation to a number of aspects of the proposal, participants expressed different views, and in some cases uncertainty, in relation to various matters, including the regulatory capital implications and potential market implications of various recovery tools. ASX recognises that industry thinking and regulatory requirements are continuing to evolve in relation to recovery and resolution. ASX will continue its



active engagement with regulators, participants and industry and will keep its recovery rules under review to address any material developments.

ASX does not propose to change the suite of recovery tools proposed in the October 2014 Consultation Paper. This suite of tools is required to ensure the recovery plans are comprehensive and effective as required by regulatory standards and are consistent with final guidance of CPMI-IOSCO on Recovery of Financial Market Infrastructure.

In response to feedback from consultation and emerging industry thinking, ASX proposes to make a number of refinements to the implementation of the recovery and replenishment tools. A summary comparison of the straw man proposals from the October 2014 Consultation Paper and the final proposals is set out in Schedule 1 for ASX Clear and Schedule 2 for ASX Clear (Futures).

ASX's approach to key issues identified is set out below:

Capped liability ASX has refined the caps for participant liability for assessments and

mandatory replenishment so participants can determine in advance their maximum potential liability. Further detail is set out in in Schedule 3, item A1.

ASX does not propose to implement a cap on payment haircutting. Further

detail is set out in Schedule 3, item V1.

**Resignation process** ASX has refined the resignation process to enable participants to resign with

capped liability for assessments and to avoid mandatory replenishment provided they close out all positions and satisfy all outstanding obligations prior to the end of the default period. Further detail is set out in Schedule 3,

items A1 and M5.

**Extension of VMGH to other payments** ASX has expanded "variation margin gains haircutting" in ASX Clear

(Futures) to apply to a broader range of payments to participants. Further

detail is set out in Schedule 3, item V5.

**Implementation of payment haircutting** ASX has refined the trigger for implementation of payment haircutting and

the basis for determining the shortfall that needs to be haircut. Further detail

is set out in Schedule 3, item V3.

Impact of partial termination on netting for accounting and regulatory capital

purposes

ASX recognises that it is critical that participants' ability to risk weight derivatives exposures on a net basis (for banks) and report cleared exposures on a net basis (for accounting purposes) is not undermined. ASX has revised its proposals to align with current industry thinking on structuring of partial termination powers as outlined in the recent ISDA discussion paper.

Further detail is set out in Schedule 3, item T1.

ASX also intends to commission legal and accounting opinions to confirm that the proposed partial termination powers do not undermine netting for accounting and regulatory capital purposes. If the rules need to be amended

as a result, ASX will do this.



# market transactions

**Extension of partial termination to cash** ASX has extended the partial termination powers in ASX Clear to apply to cash market transactions. Cash market transactions that are subject to partial or complete termination will be cancelled for no value. Further detail is set out in Schedule 3, item T1.

#### **ASX** replenishment

ASX has outlined its proposal for replenishment of its own capital in the ASX CCP default funds post recovery in Schedule 3, items M1 and M2. The proposal, under which ASX would contribute at least 50% of the new default fund post recovery, would result in ASX continuing to have significantly greater "skin in the game" than its international peers. RBA has signalled that ASX will need to consult further in FY16 on potential changes to the replenishment arrangements to facilitate a more rapid return to mutualised default cover as contemplated by international guidance.

### Size, composition and rescaling of the default fund post recovery

ASX has also outlined in further detail the size and composition of the replenished default fund and the basis for any rescaling of the default fund. Further detail is set out in Schedule 3, items M1 and M2.

#### **Transparency**

ASX has introduced a number of measures to increase transparency for participants in the implementation of various tools, including consultation with regulators and the Risk Consultative Committees of the ASX CCPs and guidelines with respect to termination pricing. Further detail is set out in Schedule 3, item T4.

#### Modelling of participant exposure

A number of participants have requested further detail in relation to the application of the recovery tools, including the likelihood of different tools being triggered based on stress testing analysis, worked examples of recovery tools and assistance with modelling exposures under various recovery tools. ASX will engage with participants on a bilateral basis to provide further detail. Contact details to arrange a bilateral discussion with ASX are set out on page 2.

### **Ballot process**

The provisions of the ASX Clear (Futures) Operating Rules that require a participant vote for specified amendments to the Operating Rules are inconsistent with the regulatory requirements for recovery and resolution which require the recovery rules to be enforceable ex ante without the need for further approvals. Consistent with recent rule changes of our main competitor in the Australian OTC market, who removed their ballot process in conjunction with implementation of their recovery rules, and broader international practice, ASX proposes to remove the relevant provisions of the ASX Clear (Futures) Operating Rules. ASX CCPs have established a number of consultative forums for gaining participant input into change proposals (including the Risk Consultative Committees and product and asset class committees). Any changes to existing default fund rules also require regulatory and ministerial approval.



#### 1.3. Resolution

The Australian Treasury is developing legislative proposals for an FMI resolution regime consistent with international standards which would enable a public authority to take control of a distressed CCP to either return it to viability or facilitate its orderly wind-down. Treasury's Consultation Paper – Resolution Regime for Financial Market Infrastructure which was released in February 2015 is available at

http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultations/2015/Resolution%20regime%20for%20financial%20market%20infrastructures/Key%20Documents/PDF/resolutionregime fmi.ashx

Section 3 of the Treasury Consultation Paper outlines the anticipated relationship between CCP recovery plans and the resolution regime.

#### 1.4. Consultation period

ASX seeks stakeholders' comments on the Exposure Draft Rules by 22 May 2015.

ASX welcomes the opportunity to discuss the Exposure Draft Rules with interested parties. ASX contact details are listed on page 2.



### 2. Non-default loss allocation

### 2.1. Exposure to non-default losses

In addition to exposure to losses following participant default, the ASX CCPs are also exposed to losses not related to participant default (including investment and custody losses and other general business losses).

The ASX CCPs are exposed to the risk of investment losses as a result of the investment of cash collateral and commitment funds lodged by participants. While these investments are in highly rated, short term liquid securities, if an investment counterparty defaults or there is a material diminution in value of an investment, the ASX CCPs could suffer a financial loss.

Custody of all non-cash collateral lodged by participants with the ASX CCPs is held by members of the ASX Group rather than external service providers. The ASX CCPs could suffer losses of assets held as collateral as a result of negligence, fraud, poor administration or inadequate record keeping.

### 2.2. Regulatory obligations in relation to non-default losses

The FSS require the ASX CCPs to have access to sufficient assets to absorb potential investment, custody and general business losses so that they can continue operations and services as a going concern if those losses materialise. ASX currently holds \$75 million in capital on behalf of both of the ASX CCPs to satisfy this requirement.

The FSS also require the recovery plans of the ASX CCPs to address investment, custody and general business losses so that the ASX CCPs can continue to provide their critical services in the event such losses exceed the financial resources available to cover such losses. These recovery plans must be consistent with the CPMI-IOSCO guidance.

Key principles outlined in the CPMI-IOSCO guidance in relation to allocation of non-default losses are:

- a CCP will need to be able to recover from an extraordinary one-off loss or recurring losses from general business, custody and investment risks
- a CCP should have comprehensive arrangements in place to allocate losses from the custody and investment risks
  it incurs as a result of its clearing activity
- for custody and investment risks, CCPs should consider exposing their owners to a share of losses arising from the
  risks, even if the facility and its participants decide that it is also appropriate for participants to share some of the
  losses or necessary for them to do so to ensure the losses can be fully addressed
- general business losses should rightly be borne by the CCPs.

#### 2.3. Existing investment arrangements

The funds of both CCPs are invested by ASX Clearing Corporation Ltd (ASXCC) as a pooled investment portfolio under the terms of a trust. ASXCC is the intermediate holding company of the ASX CCPs and is wholly owned by ASX Ltd.



ASXCC invests these funds in accordance with a documented treasury investment policy endorsed by the Boards of the ASX CCPs. The ASX CCPs provide quarterly updates on the size and composition of the investment portfolio to the Risk Consultative Committees of the ASX CCPs.

The primary objective of the treasury investment policy is to ensure that the investment portfolio is made up of highly liquid financial instruments with a high credit quality and low levels of market risk. The treasury investment policy includes limits on exposures to individual counterparties based on credit risk. Unsecured exposures are restricted to counterparties with minimum A1 short term rating. ASX is currently in discussion with RBA about further reducing its unsecured exposures to individual counterparties.

### 2.4. Summary of proposed non-default loss allocation rules

The ASX CCPs propose to put the following arrangements in place to ensure non-default losses are comprehensively addressed, consistent with CPMI-IOSCO guidance and emerging international practice:

#### **Investment losses**

- investment losses comprise losses from investment counterparty insolvency or default or diminution in market value of investments
- investment losses will first be allocated to the ASX CCPs to an aggregate amount of \$75 million. This is the amount currently held by ASX on behalf of both of the ASX CCPs to cover non-default losses
- investment losses in excess of \$75 million will be apportioned between the ASX CCPs in proportion to the amount each CCP had invested through ASXCC at the time the loss was incurred
- Investment losses in excess of \$75 million will then be allocated to participants in each CCP based on their
  proportionate share of cash collateral (including house and client accounts) and commitments lodged with the CCP
  at the time the loss was incurred
- the CCP will reduce on a pro-rata basis the cash collateral attributed to each account (house and client) to reflect
  the allocation of investment loss. Participants would be required to replace any collateral allocated to the investment
  loss. The maximum reduction in an account will be the amount of cash collateral in the account at the time of the
  default
- amounts subsequently recovered from an investment counterparty will be repaid first to participants on a pro-rata basis up to the amount of the loss allocated to them.

#### Other non-default losses

will be allocated to the CCPs.

### 2.5. International CCP comparison

ASX has reviewed and summarised the non-default loss allocation rules of 3 other CCPs who have recently revised their operating rules to address non-default loss allocation. A full copy of the review can be found on ASX's website <a href="http://www.asx.com.au/documents/public-consultations/international-comparison-non-default-loss-allocation.pdf">http://www.asx.com.au/documents/public-consultations/international-comparison-non-default-loss-allocation.pdf</a>.



### 3. Revised Operating Rules

The Exposure Draft containing the draft Operating Rules to incorporate the proposals set out in this Consultation Paper is available at:

- ASX Recovery Rulebook the Recovery Rulebook will operate as a stand-alone rulebook which will apply to both ASX CCPs – http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-rulebook.pdf
- ASX Recovery Handbook the Recovery Handbook contains the procedures applicable to the Recovery Rulebook and will apply to both ASX CCPs - <a href="http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-handbook.pdf">http://www.asx.com.au/documents/public-consultations/draft-asx-recovery-handbook.pdf</a>
- consequential and related amendment to ASX Clear Operating Rules- <a href="http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-or-consultation.pdf">http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-or-consultation.pdf</a>
- consequential and related amendments to ASX Clear (Futures) Operating Rules –
   http://www.asx.com.au/documents/public-consultations/recovery-asx-clear-futures-consultation.pdf

The proposed amendments to the Operating Rules remain subject to the usual regulatory clearance process by ASIC and RBA.

### 4. Next steps

ASX seeks stakeholders' views on the Exposure Draft Rules. Submissions should be made by 22 May 2015.

Subject to feedback on this Consultation Paper and ongoing engagement with RBA and ASIC, ASX currently intends to lodge final rules for regulatory clearance in Q3 2015.



## Schedule 1: ASX Clear default loss allocation and replenishment tools

Emergency assessments (existing tool, to be amended)

Straw man mechanics	Final proposal
Cap at \$300m in total per 'multiple default period' of 30 days post completion of default management process, subject to extension for subsequent defaults within that period	No change to cap. Default period to be 22 business days post completion of default management process.
Increase in clearing participants' individual assessment caps to be considered	Capped at pro-rata share of \$300m based on percentage of participant's IM prior to default relative to total IM of all participants, excluding the 2 participants with the largest share of IM, prior to default.
Removal of second round call to be considered, subject to resolution of individual assessment caps	Second round call to be removed
Change to IM based calculation (rather than average unsettled positions)	No change
Callable in whole or part when loss reasonably expected to deplete default fund	No change
Payable within 24 hours or such later time approved by the CCP and able to be held for multiple default period	Payable by normal margin settlement time on next business day or such later time approved by the CCP and able to be held for multiple default period
Excess repaid at end of multiple default period	Excess assessments and recoveries from defaulting CP will be repaid in reverse order to default waterfall (including recovery tools)
CCP able to set off against amounts owing by CCP	No change

### Partial termination (existing tool, to be amended)

Straw man mechanics	Final proposal
Termination of derivatives only (excludes cash equity transactions) to close out positions of defaulting clearing participant	Extend to cash equity transactions
Triggered where CCP considers appropriate to restore a matched book (e.g. is there an available market? can it be done within a reasonable time)	No change to trigger. Refined conditions to use to include:
	<ul> <li>pro-rata allocation across non-defaulting participants with opposite positions</li> </ul>
	<ul> <li>conducted at prevailing market value</li> </ul>
	must only be used to restore a matched book ie termination values must be paid in full



### Complete termination (new tool, to be added)

Straw man mechanics	Final proposal
Triggered when restoration of a matched book via other means within a reasonable time is not possible, or where CCP reasonably considers that its default loss may exceed defaulting clearing participant's IM + pre-funded mutualised default resources + emergency assessments	No change
All contracts (including deliverable contracts) to be cash settled	CCP will cash settle derivatives contracts. Cash market transactions will be cancelled for no value
Termination prices determined by CCP in commercially reasonable manner with reference to market prices	Termination prices will be set in accordance with the ASX pricing protocols for CCP margining provided that if ASX cannot determine a price under the pricing protocols or believes any such price is not commercially reasonable, it may determine a price taking into account specified criteria. ASX will consult with the Risk Committee in relation to pricing
Pro-rata reduction of termination payments by CCP to the extent those payments exceed available resources (excluding initial margin of non-defaulting clearing participants)	No change
Before resorting to termination, CCP has discretion to allow clearing participants to voluntarily make payments to cover excess losses	No change

### Mandatory replenishment (new tool, to be added)

Straw man mechanics	Final proposal
Continuing clearing participants to contribute up to \$75m in aggregate to new default fund immediately at end of multiple default period	No change to aggregate participant replenishment obligation of up to \$75m
	Individual participant replenishment liability to be initially capped at 1x assessment liability pre default
	CCP to replenish 50% of new default fund, up to \$75m
CCP has power to scale up contributions subsequently to satisfy regulatory requirements	No change. Rescalable on quarterly basis to satisfy regulatory requirements
	CCP and CPs to contribute 50/50 up to fund size of \$250m
	Rescaling to be done in consultation with Risk Consultative Committee
	Rescaling above \$250m will require rule changes and regulatory and ministerial clearance
Calculation of individual clearing participant replenishment obligations based on relative IM of continuing participants pre-default	No change



Straw man mechanics	Final proposal
Replenishment obligation arises after 30 day 'multiple default period' (whether or not a quarter end)	No change
Clearing participants may resign during multiple default period to avoid replenishment obligation (subject to all positions being closed out and other obligations satisfied)	No change, subject to minimum period of 5 business days before end of multiple default period. Resigning participants remain liable for assessments (up to capped amount) in respect of all defaults occurring in the multiple default period
Replenished default fund only available to cover losses from future defaults not prior losses	No change
Amounts subsequently recovered from defaulting CP (if any) repaid pro-rata to participants/CCP in reverse order to recovery tools and default waterfall	No change



## Schedule 2: ASX Clear (Futures) default loss allocation and replenishment tools

Emergency assessments (new tool, to be added)

Straw man mechanics	Final proposal
Capped for single default at 1x Commitment at time of default	No change
Capped for multiple defaults at 3x Commitment over multiple default period	No change
Multiple default period of 30 days post completion of default management process, subject to extension for subsequent defaults within that period	Default period to be 22 business days post completion of default management process
Emergency assessment liability per clearing participant to be a proportion of total call based on its Commitment at time of default	No change
Callable in whole or part when loss reasonably expected to deplete default fund	No change
Payable within 24 hours of call and able to be held for multiple default period	Payable by normal margin settlement time on next business day or such later time approved by the CCP and able to be held for multiple default period
CCP able to set off against amounts owing to clearing participant	No change
OTC and Futures assessments applied in same order of priority	No change
Excess emergency assessments repaid at end of multiple default period	Excess assessments and recoveries from defaulting CP will be repaid in reverse order to default waterfall (including recovery tools)

### Payment haircutting (previously Variation Margin Gains Haircutting (VMGH)) (new tool, to be added)

Straw man mechanics	Final proposal
No specific cap, but maximum exposure for a clearing participant limited to value of VM gains since default	No cap, but maximum exposure for a clearing participant limited to value of haircuttable payments since default
Triggered when CCP reasonably considers default losses may exceed available financial resources excluding 25% of assessments received	If expected losses (including default management costs) may exceed default resources (including emergency assessments received) or if expected haircuttable payments owing by the CCP exceed expected payments to be received by the CCP
Applied on a daily basis when VM outgoings on a day exceed sum of VM incoming plus default resources + 75% of assessments (i.e. non-cumulative)	Applied on non-cumulative basis when outgoing haircuttable payments exceed incoming payments available to meet those outgoings. Once the CCP determines that it no longer needs to apply payment haircutting, the CCP will run a final



Straw man mechanics	Final proposal
	variation margin cycle and recalculate payment haircuts on a cumulative basis from the time payment haircutting was implemented and adjust payments accordingly
	Payments that may be haircut will be extended to other payments to participants (e.g. coupons, fees) but excluding initial margin
Applied to clearing participant's net VM entitlement on the day	Applied to clearing participant's net entitlement for all haircuttable payments, not just VM
Ceases to apply when default management process completed successfully or when termination invoked because not possible to re-establish matched book in a reasonable time or default loss expected to exceed available resources (including emergency assessments)	No change
Pro rata repayment if any default resources (including assessments) remain unused or from funds recovered from defaulting participant	No change
No obligation on CCP to make good other than from default resources (including assessments) that remain unused or from funds recovered from defaulting participant	No change

### Partial termination (existing tool, to be amended)

Straw man mechanics	Final proposal
Extend to OTC	No change
No specified cap on settlement liability	No change
Triggered where CCP considers appropriate to restore a matched book (e.g. is there an available market? can it be done within a reasonable time?)	<ul> <li>No change to trigger. Refined conditions to use to include:</li> <li>pro-rata allocation across non-defaulting participants with opposite positions</li> <li>conducted at prevailing market value (it is intended that the CCP would generally run a final variation margin cycle prior to termination and then terminate at that price)</li> </ul>
	must only be used to restore a matched book



### Complete termination (new tool, to be added)

Straw man mechanics	Final proposal
Triggered when restoration of a matched book within a reasonable time is not possible, or where CCP reasonably considers the default loss may be so large that application of emergency assessments and VMGH may lead to contagion or be insufficient	Triggered when:  restoration of a matched book is not possible within a reasonable time frame through other means including partial termination or  non-haircuttable payments (eg default management costs, partial termination payments) would exceed remaining financial resources or  continuation of payment haircutting would not be consistent with the CCPs licence obligations (including doing all things necessary to reduce systemic risk)
Termination prices set at discretion of CCP in commercially reasonable manner with reference to market prices	Termination prices will be set in accordance with the ASX pricing protocols for CCP margining provided that if ASX cannot determine a price under the pricing protocols or believes any such price is not commercially reasonable, it may determine a price taking into account specified criteria. ASX will consult with the Risk Committee in relation to pricing
Pro-rata reduction of termination payments by CCP to the extent those payments exceed available resources (excluding initial margin of non-defaulting clearing participants)	No change
Before resorting to termination, CCP has discretion to request clearing participants to voluntarily make payments to cover excess losses or terminate positions	No change

### Mandatory replenishment (new tool, to be added)

Straw man mechanics	Final proposal
Continuing clearing participants to contribute up to \$200m in aggregate to new default fund immediately at end of multiple default period	No change to aggregate participant replenishment obligation of up to \$200m
	Individual participant replenishment liability initially capped at 2x Commitment pre-default
	CCP to replenish 50% of new default fund, up to \$200m.
CCP has power to scale up contributions subsequently to satisfy regulatory requirements	No change. Rescalable on quarterly basis to satisfy regulatory requirements
	CCP and CPs to contribute 50/50 up to fund size of \$650m
	Rescaling to be done in consultation with Risk Committee
	Rescaling above \$650m or changes to tranches will require rule changes and regulatory and ministerial approval



Straw man mechanics	Final proposal
Calculation of individual clearing participant initial contributions to new default fund based on relative Commitments of continuing participants pre-default	No change
Replenishment obligation arises after multiple default period (whether or not a quarter end)	No change
Clearing participants may resign during multiple default period to avoid replenishment obligation (subject to all positions being closed out and other obligations satisfied)	No change, subject to minimum period of 5 business days before end of multiple default period. Resigning participants remain liable for assessments (up to capped amount) in respect of all defaults occurring in the multiple default period
Replenished default fund only available to cover losses from future defaults not prior losses	No change
Amounts subsequently recovered from defaulting clearing participant (if any) repaid pro-rata to participants/CCP in reverse order to default waterfall	No change



### Schedule 3: Substantive feedback and ASX responses

Comment ASX response

### **Specific questions – Emergency Assessments**

A1. Do you agree that assessments should be capped? If so, do you agree with the proposed caps for single and multiple defaults? If not, why? In responding to this question please consider whether the capped amount would be sufficient to cover potential uncovered losses, whether the size of assessments could trigger further participant defaults and the implications of the caps for the probability that other recovery tools (such as termination) will need to be used.

### Use of capped assessments

Feedback in support of the ASX proposal to cap assessments included:

- it provides certainty to participants
- it minimises the risk of contagion
- it assists participants to manage their capital requirements
- failure to do so is likely to cause participants to exit

Feedback that was not supportive of the use of assessments included that assessments are likely to be pro-cyclical and there would be no assurance that ASX could access such assessments in the event of serious market instability.

The significant majority of feedback supported the use of capped assessments as a recovery tool. ASX will proceed on this basis.

#### Size of caps

Feedback in relation to the size of caps and basis of calculation of caps included:

- for ASX Clear, the existing caps are unfavourable to small members and may result in further defaults
- for ASX Clear, an overall cap should be set at less than CCPs pre funded default fund of \$250m
- the cap should be set consistent with each participant's usage of the CCP
- caps should be reviewed periodically
- emergency assessments should be related to the expected shortfall under stress scenarios

Based on the feedback provided, ASX proposes to proceed with the capped assessments. ASX has undertaken scenario analysis to assess the tail risk that would be covered by the assessments and considers the caps appropriate based on this analysis. ASX will engage with participants and stakeholders on a bilateral basis in relation to the scenario analysis modelling.

The caps for ASX Clear (Futures) participants will remain as follows:

- for a single default, 1x their Commitment at the time of default
- for multiple defaults in a multiple default period, 3x their Commitment at the time of default.

In response to participants' desire for certainty of their maximum assessment liability, ASX proposes to change the individual cap for participants in ASX Clear to their prorata share of the maximum \$300m assessment based on their percentage share of initial margin over a fixed quarterly period prior to the default relative to the total initial



Comment	ASX response
	margin over that period of all participants, excluding the 2 participants with the largest initial margin. This will enable participants to calculate their maximum assessment liability in advance.
	ASX will amend the operating rules to provide for annual review of assessment caps in line with the annual default fund review.
<ul> <li>Impact of resignation on liability for assessments</li> <li>Feedback in the impact of resignation included:         <ul> <li>participants should have right to choose whether or not to resign if they do not want to contribute further to the CCP without any adverse impact</li> <li>if a participant resigns prior to the emergency assessment commitment, would the participant need to commit the emergency assessment if ASX calls for the emergency assessment within the resignation period</li> <li>once use of exit rights are made, liability should be capped under multiple default period until resignation is effective</li> </ul> </li> </ul>	ASX considers that, for assessments to be effective and to minimise the incentive to resign, participants should be liable for assessments for defaults occurring during a multiple default period which commenced whilst they were a participant, even if they have given notice of resignation, subject to the caps referred to above.  Participants who have resigned will have capped liability for assessments as set out above and will not be required to replenish the default fund, provided their resignation becomes effective by the end of the multiple default period (i.e. they have closed out all of their positions and satisfied all of their obligations to the CCP). See response to M5 below for further detail on the resignation process.
A2. Do you agree that the cap for multiple defaults should be applied over a period of 30 da recommend and why? In responding to this question please note the proposal in relation to	
Feedback in relation to the length of the multiple default period included:  30 days is significantly shorter than other CCPs  it should not be less than 30 days  it should be 30 days post the full completion of the default management process  30 days is arbitrary but it is probably long enough to cover a related event  the period should be extended for multiple defaults  the cooling off period and liability cap period should be two distinct periods  aligning it with the period for replenishment makes sense	While different views have been expressed to ASX on this matter, the balance of consultation feedback favours retention of a multiple default period that commences on the date of the default and ends 22 business days post completion of the default management process (subject to extension if a further default occurs within that period). ASX considers that this is consistent with international practice.  While different views have been expressed to ASX on this matter, the balance of consultation favours alignment of the multiple default (or capped liability) period and the cooling off period for replenishment.



A3. Do you agree that the assessment liability of each non-defaulting clearing participant should be calculated proportionately based on its Commitment obligation immediately prior to the first default to occur in the multiple default period? If not, what calculation method would you recommend and why? (ASX CLF)

Feedback on this issue included that it gives certainty of assessment and allows ongoing management and monitoring of potential exposure.

There was unanimous support for ASX's proposed approach. ASX will proceed on this basis.

A4. Do you agree that increasing the individual clearing participant assessment caps would ensure a fairer apportionment of emergency assessment calls across clearing participants? In responding to this question please consider the risk for ASX Clear under existing assessment powers that any shortfall in the emergency assessment call resulting from the cap for individual clearing participants would fall on smaller clearing participants, who may be less able to pay.

#### Feedback in relation to this issue included:

- increasing caps may be necessary to cover losses but ability to pay should not be the criteria
- emergency assessments with a flat cap per participant would create uncertainty on participant's ability to top up
- an alternative may be a cap in proportion to participant's initial margin rather than a dollar amount
- do not agree that this is necessarily correct. This viewpoint is dependent on the definition of a "smaller" clearing participant (is it in terms of volume cleared, size of transactions cleared or capital available to the organisation?)

While different views have been expressed to ASX on this matter, the balance of consultation favours changes to the individual participant caps in ASX Clear. ASX proposes to change the cap for individual participants in ASX Clear as set out in A1 above.

A5. Do you agree that calculating clearing participants' assessment liabilities based on IM is appropriate? If not, what basis of calculation would you recommend and why? (ASX Clear)

#### Feedback in relation to this issue included:

- it helps tie the participant's assessment to their market activity
- relating assessments to risks rather than volume is sensible
- should be over 1 month not 1 quarter to better manage risk
- using a period prior is appropriate. Using the immediately prior period may not be appropriate if abnormal trading had occurred just before the default but using the last quarter period should reflect normal trading

In response to feedback, ASX proposes to change the individual participant caps so that they are based on the participant's pro-rata share of initial margin over a specified period prior to the default as set out in A1 above.

While different views have been expressed to ASX on this matter, the balance of consultation favours calculation over a fixed quarterly period prior to the default. The quarterly calculation would be notified to participants so participants would be able to calculate their maximum assessment exposure if a default occurred.



A6. S	Should the CCP be entitled to make a further	('second round') call on o	other clearing participants it	f a clearing participant fails to	pay its assessment? Why or why not?
		( 0000	ourse stocking points bounts in	. c. c.ccg pcpc	pay no accomment. This or may not

Feedback in relation to this issue included:

- it undermines certainty of exposure and capital costs and may complicate and delay the process
- surviving members should not be punished for other's default. Any failure to pay should be treated as a default and become part of a multiple default process
- it could lead to further defaults
- it is arguable that this should be allowed. However, this logic could be continued or a third round. Therefore, it is important to ensure that it is clear as to whether the CCP can move past a second round of calls

The significant majority of feedback supported removal of the second round call. ASX proposes to remove the second round call.

A7. Do you agree with the proposed trigger for when the CCP should be able to call an assessment? If not, why? In responding to this question please consider the CCP's need to have received assessment moneys before the point at which it requires those funds to meet its close out or other obligations to non-defaulting clearing participants.

Feedback on support of the ASX proposal included:

- the CCP needs to be able to call funds to support solvency
- it is okay for the trigger to be based on estimates

The majority of feedback supported ASX's proposed trigger to call assessments. ASX proposes to proceed on this basis.

### A8. Do you agree with the proposed timeframe for payment of assessments?

Feedback in relation to the proposed timeframe included:

- it should be predictable and without delays
- · it should reference close of business next day
- 24 hours is a short time frame but funds are required to cover losses and those not able to pay need to be identified guickly
- the time frame should allow sufficient time for non-defaulting clearing participants to realise liquid assets
- it may be difficult for some smaller participants

While different views have been expressed to ASX on this matter the balance of consultation favours a short period to pay the assessment. ASX proposes to proceed with payment due by the normal time for margin settlement on the next business day to align with margin payments the following day unless ASX determines a later time for payment.



Comment ASX response

A9. Should the CCP be entitled to call the whole assessment amount and hold it until the end of the default period? If not, why?

A number of participants supported this proposal but noted:

- CCP should be measured in doing so as not to exacerbate liquidity pressure on clearing members
- interest should be received on funds and returned within a timely manner
- the whole amount should be ring-fenced and should not be co-mingled with CCPs other obligations to avoid misappropriation

Feedback not supportive of the proposal included:

- we understand the benefit of removing operational risk but a call beyond immediate requirements may trigger contagion
- the CCP should call what it estimates is needed to cover losses and release it if it is not needed to ensure participants are not put under financial strain
- it is likely to increase the impact on the market of parties determining not to continue clearing services and therefore the longer term impact of the market as a whole
- it is preferable if CPs know and there is as little room for doubt as to when assessments will be called

While different views have been expressed to ASX on this matter, ASX considers that the CCPs should have discretion to determine the amount that should be called, subject to the agreed caps. ASX proposes to proceed on this basis.

ASX considers that the CCP should have the flexibility to call for an assessment in instalments, subject to the agreed caps. This would enable the CCP to take into account matters such as the expected size of the loss and the potential market impacts of larger calls.

The assessment amounts are only available to cover default losses.

ASX proposes to return any unused assessments after the end of the multiple default period, pooled with any remaining resources of the defaulting CP and repaid in reverse order to the default waterfall (including recovery tools).

A10. Should any remaining assessments at the end of the multiple default period be applied towards replenishment of the default fund?

Feedback in relation to this issue included:

- it should be optional
- if they are used, it may make it less likely that participants will contribute them

There was unanimous support for the ASX proposal that any unused assessments would be repaid to participants and not used to replenish the default fund, unless a participant consents. ASX proposes to proceed on this basis. Excess assessments and recoveries from the defaulting participant will be repaid in reverse order to default waterfall (including recovery tools).

A11. Should the CCP still call assessments where it is evident assessments (and VMGH, for ASX Clear (Futures)) would be insufficient to absorb estimated default losses?

Feedback did not support this position for reasons including:

- it may delay shutdown which could lead to losses for members
- unless assessments can be applied to meaningfully and fairly diminish impact of termination, the process should move directly to termination

There was unanimous support for the ASX view that assessments should not be called where it was evident that recovery tools would not be sufficient to maintain viability. ASX proposes to proceed on this basis.



Comment	ASX response
the decision to activate recovery mechanism should include an assessment of viability	
if assessments are called, members should not pay more than if we had gone straight to full tear-up	
this could unfairly disadvantage those who paid them	
A13. ASX is aware of comments by some market participants to the effect that emergency a cash calls. Do you agree?	assessments should be pre-funded, to avoid the performance risk that CCPs face with
Feedback not supportive of prefunding included:	In line with the significant majority of feedback, ASX does not propose to introduce
the Australian payment system is efficient. It should not be a problem to fund provided receive sufficient notice	prefunding of assessments.
it is not efficient from a capital point of view.	
it would be akin to pre-funding 2 or more sets of default funds when the default fund should already have been carefully calibrated	
would rather tighten member eligibility criteria	
it will impact on the investment approach of the clearing participant	
Feedback supportive of prefunding included that there is merit in participants having some skin in the game to align their risk with that of the CCP.	
Specific questions – VMGH (payment_haircutting)	

V1. Do you agree that VMGH should not be subject to a specified cap? If not, why, and what should be the basis of the cap?

Feedback on this issue included:

- VMGH is effectively capped at 100%
- we do not understand why a cap would be implemented elsewhere and not here
- caps should be based on the same calculations as other caps in the strawman
- it might make sense to have a time cap to force quick assessment of situation
- cap should be a function of time to reflect market practices ie a maximum of 5 days for example. The application of VMGH over an uncertain period of time may

While different views have been expressed to ASX, ASX considers that VMGH and other payment haircutting does not result in uncapped liability. Rather, participant liability is capped at 100% of its exposure to the CCP at any given time, which can be calculated to a statistical level of certainty. ASX does not propose to implement a cap, either based on time or amount, on the use of payment haircutting as it may undermine the effectiveness of payment haircutting or the default management process, may lead to earlier implementation of other tools such as contract termination and is inconsistent with general international practice.



Comment	ASX response
discourage members from meeting variation margin payments on out-of-the-money portfolios	After the CCP has made payment haircuts in excess of \$650m or undertaken payment haircutting for a period of more than 7 business days in any multiple default period, the CCP will consult with RBA and the Risk Consultative Committee regarding the potential impact of continued use of the tool.
V2. Do you agree that VMGH should be applied to variation margin gains on any day when point? If not, why?	there is a shortfall, rather than applied to cumulative gains from a pre-determined trigger
<ul> <li>Feedback on this issue included:</li> <li>do not fundamentally disagree with daily approach but reserve view till see drafting</li> <li>may make logical sense to help avoid the shortfall scenario</li> <li>if members are dissuaded to carry risk by squaring out their books, there may be less VMGH to draw upon as a loss resolution resource</li> <li>starting point should be day of default</li> <li>should be cumulative post default to spread the burden over a wider group to lessen contagion</li> </ul>	While different views have been expressed to ASX, ASX proposes to proceed on the basis of haircutting payments (including variation margin gains but excluding initial margin refunds) on a non-cumulative basis from the time payment haircutting commences.
	Once the CCP determines that it no longer needs to apply payment haircutting, the CCP will run a final variation margin cycle and recalculate payment haircuts on a cumulative basis from the time payment haircutting was implemented and adjust payments accordingly.
	If there are any default resources remaining after completion of the default management process, payment haircuts would be repaid to participants on a pro-rata basis, after reimbursement for other recovery tools.
V3. Do you agree with the proposed determination of a shortfall (i.e. outgoing VM > incomir why?	ng VM plus remaining default resources plus 75% of emergency assessments)? If not,
Feedback in relation to this issue included:  • it is important that assessments are called first	In response to feedback and following further consideration, ASX proposes to refine the trigger for implementation of payment haircutting and the basis of calculation as set out below.
<ul> <li>support a buffer but not clear whether 25% is the right level</li> <li>acceptable but we would prefer 100% of assessments working on assumption all members will cover</li> </ul>	ASX considers that the CCP should have discretion to implement payment haircutting if expected losses (including default management costs) may exceed default resources (including emergency assessments received). ASX considers that sufficient default
<ul> <li>we seek clarification behind the VMGH application whereby VMGH is only applied when VMGH outgoings on a day exceed the sum of VMGH incoming plus default resources plus 75% of assessments received instead of 100% of assessments</li> </ul>	resources must be set aside to cover expected default management costs to ensure that the default management process can be completed effectively. This amount is inherently uncertain and accordingly a predetermined fixed amount is not appropriate.



#### **ASX** response Comment ASX proposes that once payment haircutting has been triggered, it will be calculated received based on the shortfall of payments received by the CCP that are available to meet will the timing for VMGH occur at the current time of settlement on each day? haircuttable payments owed by the CCP on any day, without regard to any remaining default resources (which must be managed having regard to the CCP's future obligations that must be funded from financial resources and cannot be haircut), unless the CCP elects in its discretion to utilise any default resources to cover a payment shortfall. The directors of the CCP must manage remaining default resources having regard to expected future default costs and their legal duty to avoid insolvent trading. If there are any default resources remaining after completion of the default management process, payment haircuts would be repaid to participants on a pro-rata basis, after reimbursement for other recovery tools. ASX proposes to undertake the haircutting at the current time of settlement on each day. If there are haircuttable payments due by ASX at other times of the day, e.g. if intraday margins are called, ASX may run another haircutting cycle with respect to those payments. V5. Should payment haircutting extend to any other payment obligations of the CCP (e.g. coupon payments and settlement payments) rather than only variation margin? Feedback in relation to this issue included the following: While different views have been expressed to ASX, ASX notes that emerging industry thinking (including the ISDA adoption of the new terminology of pro-rata reduction of payments should not be extended as this increases the likelihood of unintended obligations or PRO in place of VMGH or variation margin haircutting) supports the knock on effect extension of payment haircutting to other payments. ASX also notes that a number of any extension of haircutting should only be to provide liquidity not to allocate loss international CCPs who have adopted recovery rules expand their payment haircutting a wider spread mutualisation will lessen contagion risk. Including other payments to include payments such as coupons, fees, price alignment interest and daily obligations should be considered if they further mutualise the losses on a nonsettlement amounts. discriminatory basis ASX proposes to expand the payments to participants which may be haircut to include all payments to participants (eg variation margin, coupons, fees, price alignment interest and daily settlement amounts) except payments required to facilitate the default management process (such as brokerage fees and auction settlement amounts) and the return of initial margin and other cash collateral will not be haircut. ASX considers that this will further strengthen the use of payment haircutting as a liquidity tool as required to comply with regulatory requirements.



Comment ASX response

V6. Do you agree that haircuts should be applied to a clearing participant's net VM entitlement? If not, how should haircuts be applied? In responding to this question please consider that as the basis of applying haircuts increases in granularity (e.g. net VM entitlement referable to each client/house account) there is a corresponding increase in the incentive for clearing participants to assist with default management by closing out positions opposing the default portfolio, however there may be increased liquidity pressure on those clearing participants.

Feedback in support of this approach included:

- this may be more consistent with a view of the CCP model that insulates clients of clearing participants from direct impact of recovery (leaving them exposed only through pricing decisions of the clearing participant(s))
- in the absence of client account level segregation, the haircut should be applied at the participant level
- as long as calculations are understood, we believe this is a practical approach

Feedback not supportive of this approach included:

- if the market continues to operate with "mixed" participation by significant institutions (ie some of whom will become clearing members, with others remaining as clients), there may be merit in increased granularity to the extent that allowed for more efficient sharing of the impact across the market
- it should be gross on both longs and shorts to spread loss and lessen contagion. Also this would better incentivise risk reduction and book matching

netting benefits may create uncertainty and could distort the numbers

- netting benefits may create uncertainty and could distort the numbers

V7. If your firm is a clearing participant, would it pass haircuts on to clients? If so, how would your firm allocate a haircut to its net VM entitlement on a day to client/house accounts?

Feedback on this issue included:

- · the ability to pass on should not be precluded
- the ability or requirement to pass this on needs to be clearly incorporated in the rules.
- the ability to pass this on to clients would lessen the risk of contagion
- It tends to be industry practice that members will have the ability to pass haircuts on to clients

In response to feedback, ASX has drafted the rules to enable participants to pass on haircuts to clients at their discretion.

While differing views were expressed to ASX on this issue, ASX proposes to proceed on the basis that haircuts will be calculated based on the clearing participant's net

entitlement. Consistent with current procedures, settlement payments will be calculated

separately for house and client accounts. However, these amounts will be netted at the

participant level for the purpose of calculating any haircut that may be applicable for

only. The haircut will then be applied separately to the house and client accounts of

Participants whose payments are suvject to a haircut on a pro-rata basis. Payments

will still be made separately for house and client accounts.

that participant. The netting of accounts at participant level is for calculation purposes



Comment	ASX response
<ul> <li>this would be reviewed on a case by case basis based on our client relationship</li> <li>we would not pass it on because we could not identify clients affected in omnibus account</li> </ul>	
V8. Do you agree that VMGH should cease to apply when the default management process	s ends or has failed or when the default loss is expected to exceed available resources?
Feedback in support of the ASX proposal include:  VMGH should be used as an interim measure while default management remains effective  if VMGH won't be effective, should move to next steps  should apply for a limited time from default or when expected loss exceeds resources before the time period from default lapses  VMGH should end upon reestablishment of a matched book or instigation of a complete tear up driven by insufficient resources  recovery tools should only be used when CCP remains viable	The majority of feedback supported ASX's proposal. ASX proposes to proceed on the basis that payment haircutting will cease:  • if ASX determines that it does not need to implement further haircutting which may occur in circumstances including where:  • it has re-established a matched book through the default management process or  • it has determined that the size of the default losses are such that it can pay losses and haircuttable payments out of available resources  • if ASX determines to proceed with complete termination which may occur if:  • the CCP reasonably expects that it cannot otherwise restore a matched book in a reasonable time frame (including through use of partial termination)  • the CCP reasonably expects that non-haircuttable payments will exceed available default resources  • the continued use of payment haircutting would not be consistent with its licence obligations, including its obligation to do all things necessary to reduce systemic risk.



V9. Do you agree with the use of VMGH as a liquidity tool? If not, why and what tools would you propose be used to manage liquidity shortfalls?

Feedback supportive of the ASX proposal included:

- it incentivises participants to control exposures
- it has some attraction as it provides a source of liquidity that arguably will carry the least risk of contagion because it only attaches to gains
- supportive but need greater clarity around operation and impact of VMGH

Feedback not supportive of this proposal included that VMGH operates asymmetrically and punishes those with in the money positions and could lead to default for those with offsetting positions in another CCP.

The majority of feedback supported use of payment haircutting as a liquidity tool. ASX proposes to proceed on this basis.

V10. Do you agree that VMGH is not appropriate for ASX Clear? If not, on what basis would you propose that it be implemented? Do you consider that any other form of payment haircutting or loss distribution charge should be applied before moving to termination of contracts?

Feedback in relation to this issue included it is not appropriate because variation margin is not used for equities.

The majority of feedback supported ASX's proposal. ASX proposes to proceed on this basis.

### **Specific questions – Termination**

T1. Do you agree with the retention and amendment of powers of partial termination? If not, why? Do you agree that settlement liabilities under these powers should not be subject to a specified cap? If not, why and what should an appropriate cap be? Do you agree that the power should be triggered where restoration of a matched book is not possible within a reasonable time? If not, why?

Feedback supportive of the ASX proposal included:

- it may avoid complete termination or replenishment
- a form of partial termination is preferable from the perspective of (a) systemic safety and (b) continuity of a clearing service, as long as it is compatible with the accounting and regulatory capital framework
- there should not be a specified cap to assist in avoiding complete termination

Feedback not supportive of the ASX proposal included:

- unfairly affects the subset of members with impacted positions, who would need to replace positions and would likely suffer unpredictable and unreasonable replacement costs
- could contradict no creditor worse off than insolvency principle

While ASX has received differing feedback on this issue, ASX considers that the balance of feedback and emerging international thinking favours retention of partial termination on the following conditions:

- it must be performed on a pro-rata basis across all participants that have opposite positions (based on the net position held by the participant across all accounts)
- it must be conducted at prevailing market value (in ASX Clear Futures, it is generally intended that the CCP would run a final variation margin cycle prior to termination and then terminate at that price)
- it must only be used to restore a matched book i.e. termination values must be paid in full.



- it introduces uncertainty in liability determination
- the inherent lack of transparency and lack of control for participants when partial tear-up tools are used
- potential damage to netting sets in an environment where a clearing member may struggle to re-establish terminated positions because it creates uncertainties as to which trades will be closed out and thus unfairness on loss absorption.
- Selective tear-up goes against the whole concept of loss mutualisation. There is no
  meaningful way to quantify losses from forced allocation as a result of selective tearup, making this equivalent to unlimited liability
- may concentrate significant losses in a small number of clearing participants/clients.
   As such the process could significantly destabilise the clearing members most impacted, with potential systemic impacts, particularly if such parties are also clearing members at other CCPs

ASX proposes to proceed with partial termination on this basis.

In ASX Clear, ASX proposes to extend partial termination to cash market transactions. If partial termination was required in ASX Clear, relevant cash market transactions would be cancelled for no value.

ASX recognises that it is critical that participants' ability to risk weight derivatives trade exposures on a net basis (for banks) and report cleared exposures on a net basis (for accounting purposes) is not undermined by partial termination rules. ASX intends to seek opinions in relation to these matters and will further refine the recovery rules if necessary to give participants commercial certainty.

T2. Do you agree that complete termination should be available where restoration of a matched book within a reasonable time is not possible, or where the CCP reasonably considers default loss may be so large that application of emergency assessments (and VMGH, for ASX Clear (Futures)) may lead to contagion or would be insufficient? If not, why?

Feedback in relation to this proposal included:

- termination may allow for return of initial margin.
- provided all participants agree, it has legal certainty and complete termination is performed in a transparent and cost efficient and timely manner
- · as a last resort to avoid participant default and get the market restarted immediately
- it must be done in an orderly fashion that is predefined and transparent to all participants.
- recovery of a clearing service is generally preferable to its closure (complete termination), particularly in times of severe market stress. We acknowledge that complete termination may be a recovery tool that may be used to ensure the recovery and continuity of the CCP
- soliciting clearing participants using a voting process may be appropriate
- would like to see details of decision process and consultation with CPs
- possibly a joint decision with ASX/DFM committee and regulator

While ASX has received differing feedback on this issue, ASX considers that the balance of feedback favours triggering complete termination where:

- the CCP is unlikely to otherwise be able to restore matched book within a reasonable time frame or
- non-haircuttable payments (eg default management costs, partial termination payments) would exceed remaining financial resources or
- continued use of payment haircutting would not be consistent with the CCPs licence obligations (including doing all things necessary to reduce systemic risk)

ASX proposes to proceed on this basis. ASX will also provide for consultation with the Risk Consultative Committees before complete termination is triggered.



### Feedback not supportive of the ASX proposal included:

- a resolution authority should step in to continue to operate the CCP
- would create asymmetry of risk, may result in extreme price volatility and unpredictable levels of gains and losses, collapse in price of many types of collateral
- provision should be made for a fund that would be set aside and used by regulators to fund the new guarantee fund of a bridge entity into which CCP assets would be transferred. All non-defaulting positions could remain open
- impacts on the wider market need to be analysed before this approach is validated.
   A complete termination would impact underlying clients and their counterparts outside the ASX

T3. Do you agree cash market transactions should be cash settled on a mark to market basis to facilitate complete termination? If not, on what basis would you propose that these transactions be terminated?

#### Feedback in relation to this issue included:

- cash market transactions should be settled on a mark to market basis to facilitate complete termination
- cash market transactions should not be settled at all. We do not agree with a mark to
  market settlement on complete or partial termination. We believe that a cash market
  transaction should be settled in full or following a standard partial settlement
  approach
- the most expedient option is best, whether this is physically settled or cash settled

ASX has received differing feedback on this issue. In response to feedback, ASX proposes that ASX Clear will cancel cash market transactions for no value on partial or complete termination.

T4. Do you agree that termination prices should be determined by the CCP in a commercially reasonable manner with reference to market prices? If not, why?

#### Feedback in relation to this issue included:

- should refer to prices in other markets or prices prior to default situation
- pricing must be transparent
- it should be made clear in the ASX guidelines as to what the reference data will be used
- should be done at last settlement price (for partial termination)
- termination prices should be determined by auction bidding process or an averaging

While ASX has received differing feedback on this issue, ASX considers that the balance of feedback favours ASX's proposal to retain flexibility to determine market prices on complete termination.

ASX recognises the need for transparency and, in response to feedback, has refined the rules to provide for termination prices to be determined in accordance with ASX's current pricing protocols for margining provided that if ASX cannot determine a price under the pricing protocols or believes any such price is not commercially reasonable, it may determine a price taking into account specified criteria.



modulat acceptation appared similar to one out in ICDA coop alone and	ACV will also consult with the Diele Committee in relation to termination relation
<ul> <li>market quotation process similar to one set in ISDA upon close out</li> <li>using a theoretical final value for positions is ambiguous and inappropriate – the only realistic price is the one determined during an auction bidding process. There is no justification for a CCP to unilaterally determine that their theoretical value is more correct than that determined by market participants. This is especially true if a previous auction had only partially cleared the defaulter's portfolio as this indicates that the residual portfolio is toxic, either in market or liquidity risk</li> <li>consultation of the RBA seems to be a must</li> <li>subject to input from non-defaulting participants</li> <li>greater clarity of the role of the DMG is required, particularly in relation to determination of termination prices</li> </ul>	ASX will also consult with the Risk Committee in relation to termination pricing.
Consultation Feedback in relation to a number of tools indicated that participants should be consulted.	In response to feedback, ASX will provide for consultation with the Risk Committees, to the extent reasonably practical, in relation to:  • the impact of ongoing use of payment haircutting when haircuts exceed \$650m or have been undertaken for a period of more than 7 business days  • triggering partial termination and complete termination  • selection of positions for termination  • pricing on termination  • scaling of default funds post recovery  • voluntary payments  ASX also notes that implementation of any recovery measures will be undertaken in close consultation with regulators including RBA and ASIC as required by ASX's regulatory and licence obligations.
T5. Should non-defaulting clearing participants have the opportunity to make voluntary pays so, what defined period should be allowed for such actions?	ments, or volunteer selected contracts for termination, prior to complete termination? If
Feedback supportive of the ASX proposal included:         it should not negatively impact other non-defaulting CPs         with member's consultation if it promotes an orderly market         CCP should provide a listing of complete termination contracts to non-defaulting	The significant majority of feedback supports retention of voluntary powers. ASX intends to limit these powers to receipt of voluntary payments.



participants and allow 24 hours for participants to volunteer contracts for termination

- supportive in theory but feel that it may not be feasible due to the time frame
  required to implement and potential delay in internal validation by the CP in order to
  confirm amounts or contracts to be terminated. The period allowed needs to be
  within a couple of days maximum
- support flexibility of clearing members to fully meet the costs of restoring a CCP to viability provided this was at the relevant clearing member's own volition
- it may help and avoid mandatory termination

### **Specific questions – Mandatory Replenishment**

M1. Is the proposed replenishment baseline of up to \$75m in contributions by continuing clearing participants a reasonable starting point for the re-establishment of the default fund? Why? (ASX Clear only)

Feedback supportive of the ASX proposal included:

- the current fund is too large and to fully replenish it would be too stressful to the industry in an extreme time
- the current model does not incentivise individual participants to manage their risk carefully because they do not have 'skin in the game' before other CPs or the CCP

Feedback not supportive of the ASX proposal included:

- the figure is likely to result in a number of participants deciding not to continue in the market, placing more pressure on those clearing participants who do wish to continue
- as it is a percentage based calculation, based on those non-defaulting clearing brokers still wishing to be a clearing broker, the actual exposure is not known in advance
- the CCP is not a mutualised organisation. Replenishment should be done by CCP shareholders
- the proposals do not specify ASX shareholder responsibility for default fund replenishment versus CP responsibility.

There was general support for a lower initial default fund after a recovery situation which depletes the entire default fund, with mixed views as to whether and to what extent participants should contribute.

ASX has drafted the Operating Rules based on the following principles for losses exceeding the default fund:

- replenishment obligations would be subject to an assessment by the CCP of ongoing viability
- if viable, ASX and participants would initially replenish on a 50/50 basis up to \$75m each (i.e. up to \$150m total default fund size)
- the tranches for a \$150 million fund would be \$75m of ASX capital in the first tranche followed by \$75 million of participant contributions
- if the CCP determines that a fund size of less than \$150m is sufficient, contributions to each tranche would be scaled back proportionately
- initial participant contributions would be calculated based on their IM over a
  fixed quarterly period prior to default relative to the IM of all continuing
  participants over that period, subject to a cap of 1x their maximum emergency
  assessment liability pre-default
- after the initial replenishment, the calculation of contributions would revert to a quarterly readjustment in accordance with normal procedures to reflect



changes in post recovery positions of participants and changes in the size of the default fund

- if the amount initially replenished is subsequently determined to be insufficient
  to satisfy regulatory requirements, the CCP can rescale the default back to a
  maximum of \$250m. Any increase in fund size beyond \$250m will be subject to
  amendments to the operating rules and regulatory and ministerial clearance
- rescaling will be undertaken on a quarterly basis
- the CCP will consult with the Risk Consultative Committees on any rescaling of the default funds
- any additional funds required on rescaling up to \$250m will be contributed on a 50/50 basis by ASX and participants and those funds will go into a single tranche at the end of the waterfall.

Refer to Schedule 5 for an illustrative example of the time for rescaling of the default fund following replenishment.

For losses of less than the current default fund size of \$250m, ASX will replenish amounts utilised up to \$75million. For losses of less than \$75m, no participant contribution would be required and the default fund size would remain \$250m.

For losses exceeding \$75m, if the default fund after ASX replenishment is insufficient to satisfy regulatory requirements, participants will be required to contribute the difference to a maximum of \$75 million, with individual contributions calculated on the same basis as set out above. Participant funds would be inserted in a new second tranche after the first \$75 million of ASX capital, followed by any remaining ASX capital.

Replenishment for losses within the default fund will always result in a default fund size of at least \$150m and ASX assets will represent at least 50% of the default fund. The default fund will be subject to rescaling as set out above.

Refer to Schedule 7 of the Recovery Handbook for some illustrative examples of replenishment.

ASX considers this replenishment proposal is appropriate as:

it avoids undue pressure on potentially stressed markets, it seeks to replenish
to a minimum sustainable level in the short term with the capacity to
subsequently rescale as the size of exposures increases. The CCPs may also



utilise other measures such as changes in STELS, margin rates and additional margin calls during the transition period

- both ASX and participants will have "skin in the game" and that "skin in the game" will be scalable based on risk for all parties
- ASX's "skin in the game" will remain significantly higher than its international peers
- a scalable default fund is consistent with the vast majority of ASX's international peers

The rules are explicit that the new default fund cannot be used for losses incurred prior to replenishment. It is also a condition of replenishment that losses from any pre-existing default have been fully allocated.

Comment ASX response

M2. Is the proposed replenishment baseline of up to \$200m in contributions by continuing clearing participants (ETD \$100m, OTC \$100m) a reasonable starting point for the reestablishment of the default fund? Why?

Feedback in relation to this issue included:

- we would expect the default fund size to be the same as pre-default
- we would like to clarify whether this is reflective of current level of default fund or a new proposed higher level
- the starting point should be equal to the contribution at the time subject to the sizing and calibration methodology and the split between ASX and participants.
- · contributions should be based on post recovery positions not pre-default commitments
- we would rather a multiple of default fund than a fixed dollar amount
- uncertainties and unfairness on the top-up contribution will encourage participants to exit
- this figure is likely to result in a number of participants deciding not to continue in the market, placing more pressure on those clearing participants who do wish to continue
- the proposals do not specify ASX shareholder responsibility for default fund replenishment versus CP responsibility

There was general support for a lower initial default fund after a recovery situation, with mixed views as to whether and to what extent participants should contribute.

ASX has drafted the Operating Rules based on the following principles for losses exceeding the default fund:

- replenishment obligations would be subject to an assessment of ongoing viability
- if viable, ASX and participants would replenish on a 50/50 basis up to \$200m each (i.e. up to \$400m total default fund size)
- the tranches for a \$400 million fund would remain the same as currently except the CCP second tranche would be reduced from \$150m to \$80 million and the CCP third tranche would be eliminated
- if the CCP determines that a fund size of less than \$400m is sufficient, contributions to each tranche would be scaled back proportionately
- initial participant contributions would be calculated based on their Contribution pre default relative to the Contributions of all continuing participants, subject to a cap of 2x their Contribution pre default



- after the initial replenishment, the calculation of participant contributions would revert to a quarterly readjustment in accordance with normal procedures to reflect changes in post recovery positions of participants and changes in the size of the default fund
- if the amount intiialy replenished is subsequently determined to be insufficient
  to satisfy regulatory requirements, the CCP can rescale the default back to a
  maximum of \$650m. Any increase in fund size beyond \$650m will be subject to
  amendments to the operating rules, regulatory and ministerial approval
- rescaling will be undertaken on a quarterly basis
- any additional funds required on rescaling up to \$650m will be contributed on a 50/50 basis by ASX and participants and those funds will go into a single tranche at the end of the waterfall
- the CCP will consult with the Risk Consultative Committees on any scaling of the default funds.

Refer to Schedule 5 for an illustrative example of the time for rescaling of the Default Fund.

For losses of less than \$650m, the same rules will apply except each of ASX and the participants would replenish amounts utilised up to \$200m each and amounts replenished would go back into the same tranche from which they were utilised. The default fund size would be a minimum of \$400m and ASX would contribute at least 50% of the default fund. The default fund will be subject to rescaling as set out above.

Refer to Schedule 7 of the Recovery Handbook for some illustrative examples of replenishment.

M3. Do you have any views on likely size of market and trading behaviour post recovery scenario? What do you consider the likely impact of those considerations on the CCP's post-recovery requirements for pre-funded mutualised default resources?

Participants noted the following in relation to potential market size and trading behaviours post recovery:

- difficult to predict. Some members may reduce exposures, others may have absorbed the portfolio of the defaulting participant, some members may resign
- market trading volumes would be reduced until market confidence returns

ASX appreciates the feedback and recognises that the potential market size is difficult to predict. For this reason, ASX's proposed approach to replenishment has been structured to provide for a minimum sustainable level of default fund for immediate replenishment with a subsequent rescaling of the default fund as required to comply with regulatory requirements.



- difficult to predict but likely that investor confidence will be lower so volumes and trade size will decrease, particularly if this situation has been specific to the Australian market
- this is very hard to forecast. Most likely scenario is of less volume for a while and therefore that less funding is required

M4. Should clearing participant contributions to the default fund be scalable by the CCP? If so, on what basis, and should scalability be subject to caps and floors?

Feedback in relation to scaling of the default fund included:

- scalability should be subject to caps and floors, with some flexibility required for the number and size of participants and the market at any given time
- participant contributions should be equitable, based on trading activity and contribution to risk profile
- ASX skin in the game should be scalable to overall fund size rather than fixed
- scalability should be determined by an independent body rather than the CCP to ensure that the interests of all parties are fully considered
- the default fund should evolve in proportion to the risk taken by the CCP or the CCP should provide justification acceptable to the Clearing Members that the static approach is conservative enough to remove the need for a dynamic default fund

Feedback not supportive of the proposal for scaling of default fund included:

- the CCP's ability to scale up default funds creates uncertainties for participant capital costs and exposures for prudential purposes
- any increases would adversely impact the commercial realities and would likely lead to exits and concentration risks and possible contagion as a result
- ASX should carefully calibrate for plausible as now as a starting point. Increased IM should be used in preference to scaling of default funds

The balance of feedback and international practice supports having a scalable default fund after a recovery situation. ASX proposes to proceed on this basis. Refer to sections M1 and M2 above for further detail on rescaling.

M5. Do you agree that clearing participants should be able to resign to avoid replenishment? What resignation requirements and timeframes should apply to avoid incentivising clearing participants to exit quickly in a crisis?

Feedback in support of the ASX proposal included:

 participants should have the option of resigning from the CCP as part of its risk management process to manage its exposures. Any changes to such a facility The significant majority of feedback was supportive of ASX's proposal to implement a multiple default period during which participants can resign with capped liability for assessments and so that they are not liable to replenish the default fund. ASX



would be likely to result in a smaller field of participants

- support for the "cooling off period" after multiple defaults during which ASX may not call for any mandatory replenishments
- the condition of the market would likely create a "natural restraint" on exiting too quickly
- otherwise participants will be forced to cater for the worst case upfront when
  considering whether to retain membership upon implementation of proposed
  changes and so it is likely that this approach is more likely to maintain competition in
  the market place in the short term

Feedback not supportive of the ASX proposal included:

- it may trigger other members and lead to service closure as liquidity dries up.
   Theoretically, CCP should have time to assess longer term viability (and restore service) before members can leave
- resignation time frames should be the same as current timeframes.
- participants should be able to resign and a reasonable time in our view is after 3 months
- there do not seem to be measures in place to discourage members exiting

proposes to proceed on this basis. ASX considers it important to balance the desire for participants to resign with capped liability and managing those exits in an orderly fashion to minimise the impact on market stability.

ASX's proposed resignation regime after a default is as follows:

- participants may resign subject to a minimum of 5 business days prior to the end of the multiple default period
- their resignation will take effect on the last day of the multiple default period provided they have closed out all of their positions and satisfied all of their obligations at that time
- participants will be liable for any assessments called in respect of any default occurring during a multiple default period which commenced before their resignation became effective, subject to the caps referred to above
- participants will not be required to replenish the default fund if their resignation has taken effect at the end of the multiple default period
- ASX may request participants to provide cover for any potential liability for an
  assessment that has not yet been called and may take such action as it
  considers appropriate (including withholding repayment of IM) to satisfy this
  obligation.

As a result of the above, participants who have resigned will have capped liability for assessments as set out above and will not be required to replenish the default fund, provided their resignation becomes effective by the end of the multiple default period (ie they have closed out all of their positions and satisfied all of their obligations to the CCP). Refer to Schedule 4 for an illustrative example of the resignation timeline.

In light of feedback on natural restraints on exit and the capped liability of participants for the application of recovery tools before their resignation becomes effective, ASX does not propose to impose any additional measures to discourage participants to exit.



M6. ASX is aware of comments by some market participants to the effect that clearing participants' replenishment obligations should be pre-funded and held in 'escrow', to effectively guarantee continued service provision by CCPs. Do you agree? What impact (if any) would this have on the regulatory capital cost of clearing?

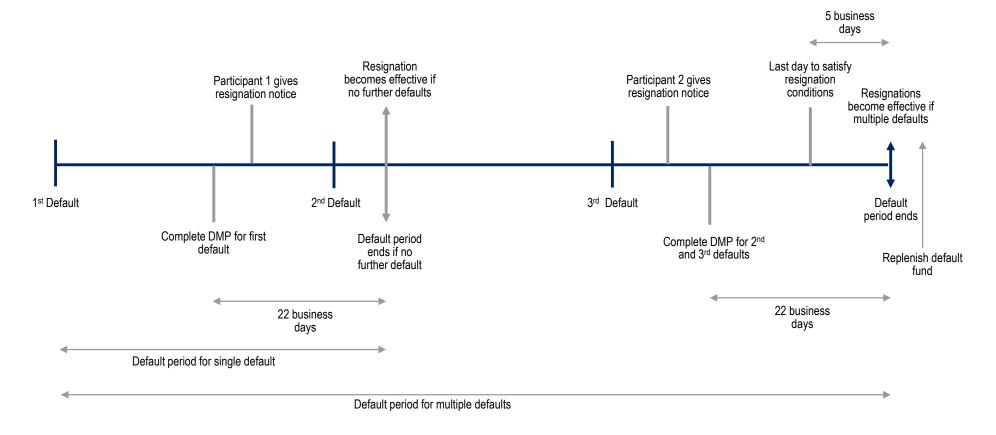
Feedback on this issue included:

- the cost of clearing would increase as funded commitments are more capital intensive
- while continuity is preferred it cannot and should not be guaranteed. Pre funding opens questions around escrow, commercials, usage and triggers as well as cost of capital to be reviewed
- clearing participants should be permitted to resign prior to any replenishment
- in respect of ASX Clear, the current model does not incentivise individual CPs to
  manage their risk carefully because they do not have 'skin in the game' before other
  CPs or the CCP. We therefore see merit in prefunding and escrow as an alternative
  model provided it is accompanied by lower clearing fees

The balance of consultation does not support pre-funding of a new default fund. ASX proposes to proceed on this basis.



### Schedule 4: Default period and resignation timeline example



#### Notes

- \* Default period ends 22 business days after completion of default management process
- \* Default period extended if subsequent default occurs within default period
- \* Capped liability for assessments applies for default period regardless of when notice given. For example, participant 1 would remain liable for assessments for the 2<sup>nd</sup> and 3<sup>rd</sup> defaults.
- \* All resignations during default period effective on this day provided conditions to resignation (such as close out of positions) satisfied.



### **Schedule 5: Rescaling timeline example**

- \* This Schedule shows an indicative timeline of rescaling of the Default Fund after replenishment
- \* Dates are for illustrative purposes only and are approximate only

