



**Invitation to comment**

Contacts ASX is seeking submissions on the Enhanced Client Protection Account Structures canvassed in this paper by 22 August 2014. Submissions should be sent to:

E Ben.Symonds@asx.com.au

Attention: Ben Symonds

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 on the Enhanced Client Protection Account Structures canvassed in this paper.

**Contacts**

For general enquiries, please contact:

**Ben Symonds** – Manager Clearing

Services

T +61 2 9227 0474

E Ben.Symonds@asx.com.au

**Danielle Henderson** – General Manager

Clearing Services

T 02 9227 0535

E Danielle.Henderson@asx.com.au

Media enquiries, please contact:

**Mr Elliott Giakalis** – Media and

Communications Executive

T 02 9227 0720

E Elliott.Giakalis@asx.com.au

## CONTENTS

<b>Executive Summary</b> .....	<b>3</b>
<b>2 Introduction</b> .....	<b>4</b>
2.1 Scope .....	4
2.2 Frequently Used Terms .....	4
<b>3 Background</b> .....	<b>5</b>
3.1 New Regulatory Standards .....	5
3.2 The Current ASX Clear (Futures) Default Process .....	6
3.3 Risks .....	6
3.4 Client Feedback .....	7
<b>4 Account Structure Models</b> .....	<b>8</b>
4.1 Individual Client Account (ICA) with Excess .....	8
4.1.1 Value Attribution .....	8
4.1.2 Asset Attribution .....	9
4.2 Full Asset Segregation .....	9
4.2.1 Physical Segregation via CP .....	9
4.2.2 Physical Segregation Direct to CCP .....	10
4.2.3 Physical Segregation to a third party Custodian .....	10
Account Model Summary (table) .....	11
Summary of Risks (table) .....	12
4.4 A brief note on the term Bankruptcy Remote .....	13
4.5 A brief note on capital requirements for bank exposures to CCPs .....	13
<b>5 ASX Potential Solutions</b> .....	<b>14</b>
5.1 Using CSD (Austraclear) .....	14
5.2 Using ASX Collateral to move collateral at CSD (Austraclear) .....	15
<b>6 Next Steps</b> .....	<b>17</b>
<b>Questionnaire Summary Table</b> .....	<b>18</b>
<b>Costing Estimate</b> .....	<b>23</b>

## Executive Summary

This is the first of two Consultation Papers in which ASX will seek stakeholder input on enhancing the account structure it uses for its Client Clearing Service for both ASX 24 Exchange Traded Derivatives ("ASX 24 ETD") and OTC Interest Rate Derivatives ("OTC"). ASX believes that enhancing the account structure is important in offering increased collateral protection to clients.

This first Consultation Paper provides some background to possible enhancements to the account structure in order to determine the level of collateral protection favoured by stakeholders. Based on feedback from this Consultation Paper, a second Consultation Paper will be released in Q4 2014, presenting ASX's proposed solution for an enhanced account structure and its supporting rules framework.

The current account structure for the Client Clearing Service launches with an Individual Client Account without excess structure; this is now live for OTC, and will go-live for ASX 24 ETD in July<sup>1</sup>. Where a client has opened an Individual Client Account (without excess) at ASX, the value of collateral associated with that individual client's initial margin, together with that client's positions, is legally segregated in an individual client sub-account ("ICA"), while, the collateral of all clients of the Clearing Participant is held in an operationally commingled account, a "pooled client collateral account"<sup>2</sup>. This account structure offers clients protection of collateral value up to the level of initial margin associated with those positions. It does not however offer protection of excess collateral, be that excess cash or eligible non-cash collateral.

Excess collateral is defined as collateral (in terms of value or specific assets) posted by a Clearing Participant to its Client Clearing Account with ASX which exceeds the amount of its initial margin obligation. Under the current structure, ASX is not able to identify or port any excess collateral in a default event. Excess remains in the pooled client collateral account, and this can be used by ASX to offset various shortfalls before returning any remaining additional excess to the administrator of the Clearing Participant.

As a minimum, an enhanced account structure would extend collateral protection to excess collateral lodged with ASX, be that excess cash or eligible non-cash collateral. A Clearing Participant may require a client in an ICA to provide additional margin, which is retained by the Clearing Participant, however, such additional margin would not be protected under an enhanced account structure. Different enhanced account structures potentially affect not only the level of collateral protection for clients, but also operational processes, and the distribution of risks and commercial returns between ASX, Clearing Participants and their clients. ASX is aware from customer and Clearing Participant feedback received to date, and from offshore market developments, that there is a trade-off between increasing levels of collateral protection and cost efficiency, with higher levels of protection generally being more complex (operationally and from a technology build perspective) and therefore entailing greater cost to end users. The models described in this consultation present varying levels of collateral protection.

The following structures are discussed in this paper

- ICA with Excess – collateral is readily identifiable and protected. This may either be the value of collateral, or identification of the asset. A notification method would be implemented between the Clearing Participant and ASX to identify excess collateral, yet collateral remains (operationally commingled) in the pooled client collateral account of the Clearing Participant.
- Full segregation – the lodgement of cash or non-cash collateral, which is physically segregated in an account in the name of, or referencing, the underlying client. This Consultation Paper provides several generic examples of full segregation for non-cash collateral.

This paper will also present ASX potential solutions to delivering enhanced segregation under both structures, utilising Austraclear and ASX Collateral.

ASX would value feedback from stakeholders on the possible enhanced account structures. Responses from stakeholders are required by 22 August 2014.

<sup>1</sup> Under the Client Clearing Service Clearing Participants may, but are not obliged to, offer their clients Individual Client Accounts (without excess).

<sup>2</sup> This is similar (but not identical) to the Legally Segregated Operationally Commingled (LSOC) account protection model introduced by the CFTC under the Dodd Frank reforms.

## 2 Introduction

### 2.1 Scope

This paper represents the first phase of consultation on enhanced client protection. It aims both to inform and to seek initial feedback from market stakeholders. In doing so, it presents high level concepts of enhanced protection, utilising models already delivered offshore and feedback garnered from previous ASX consultations with the market. The perceived benefits, risks and disadvantages of each proposed structure will also be discussed. ASX is particularly interested in feedback on the likely impact on ongoing operational revenues and costs of these proposed account structures, together with implementation cost estimates. Suggestions for alternative approaches that efficiently achieve the same policy objectives and regulatory standards are especially welcome.

There are several core objectives which ASX believes should guide ongoing discussion:

- ASX should offer account structures that protect ASX Clear (Futures) clients/end-users in the event of a Clearing Participant default;
- ASX account structures and their associated arrangements should be operationally and commercially viable for Clearing Participants and clients/end-users;
- ASX account structures should support cross-margining (where possible) of OTC and exchange-traded products;
- ASX should design a solution which minimises regulatory capital requirements for Clearing Participants and client/end-users;
- Clients and end-users should be aware of the risks associated with particular account structures; and
- CCPs and their users must comply with their regulatory requirements, including those relating to portability and segregation. This will require enhancements to the existing account segregation arrangements.

ASX welcomes any additional feedback you may have on the topic, including experience gained from meeting regulatory and customer requirements offshore, and views on how certain structures may work / fail in the Australian market.

### 2.2 Frequently Used Terms

Terms that are frequently used in this Consultation Paper are defined below.

Term	Meaning
Associated Initial Margin	In respect of positions recorded in a client account, the initial margin requirement calculated by ASX with respect to the positions.
ASX	ASX Clear (Futures) Pty Limited, the central counterparty for ASX 24 ETD and OTC
ASX 24 ETD	Derivatives traded on the ASX 24 market.
CCP	Central counterparty
Clearing Participant	A participant of ASX Clear (Futures).
Client	A person on behalf of whom a Clearing Participant acts in respect of cleared contracts.
Collateral	Cash or eligible non-cash collateral (as specified in ASX Clear (Futures) Operating Rules Schedule 5).
Excess Collateral	Collateral (in terms of value or specific assets) posted by a Clearing Participant to its Client Clearing Account with ASX which exceeds the amount of its clients' initial margin obligation.

ICA	Individual client sub-account at ASX.
LSOC	Legally Segregated Operationally Commingled. Protection structure introduced by the CFTC under the US Dodd Reform act. Client Positions and value of initial margin pertaining to those positions is held legally segregated from those of the Clearing Participant and fellow customers in an individual segregated account. Client collateral is operationally comingled in the Clearing Participant's pooled collateral account.
Omnibus Client Account	Where all client positions and collateral are held in a single client account of the Clearing Participant and the clearing house calculates initial margin on the net position in that account.
OTC	OTC Interest Rate Derivatives
Pass Through Collateral Rules	Rules may be required by the CCP that legally requires Clearing Participants to immediately pass through collateral provided by the Client to the CCP.
Pooled Client Collateral Account	The collateral of all clients of a Clearing Participant (whether positions held in an omnibus or ICA account) is held in an operationally comingled account at the CCP.
Portability	The positions and collateral of a defaulting Clearing Participant's clients can be transferred to one or more other participants.
Segregation	A method of protecting customer collateral and contractual positions by holding or accounting for them separately from the direct Clearing Participant (such as a carrying firm or broker). This concept can be extended to client segregation from other clients.

## 3 Background

### 3.1 New Regulatory Standards

In December 2012 the Reserve Bank of Australia (RBA) released new Financial Stability Standards for Central Counterparties<sup>1</sup>. These standards are based on the CPSS-IOSCO Principles for Financial Market Infrastructures. The requirements on segregation and portability include that a "central counterparty should employ an account structure that enables it readily to identify [customer] positions ... and to segregate related collateral" (Standard 13.2). Further, "a central counterparty should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants" (Standard 13.3)<sup>3</sup>.

The RBA provided supplementary guidance on its interpretation of the standards on 16 August 2013 under which ASX will be expected to "make available to its participants an account structure that enables its participants to offer their customers, in addition to a net omnibus client account structure, an option that allows for separate identification and protection of individual customers' gross positions and collateral (or collateral value)"<sup>4</sup>.

In response to regulations ASX launched OTC Client Clearing in April 2014, and will launch Futures Client Clearing in July 2014, utilising an ICA "without excess" account structure.

This structure enables a client's open position to be held on a segregated basis, while collateral posted is operationally comingled in a single pooled client collateral account, at Clearing Participant level. The collateral value of the client related to its associated initial margin is identifiable based on the position held, and as such readily portable at the time of Clearing Participant default.

<sup>3</sup> Please see [www.rba.gov.au/payments-system/clearing-settlement/standards/central-counterparties/2012/standard-13.html](http://www.rba.gov.au/payments-system/clearing-settlement/standards/central-counterparties/2012/standard-13.html)

<sup>4</sup> Please see [www.rba.gov.au/payments-system/clearing-settlement/standards/201212-new-fss-ris/pdf/attachment-3.pdf](http://www.rba.gov.au/payments-system/clearing-settlement/standards/201212-new-fss-ris/pdf/attachment-3.pdf)

Under the additional FSS interpretation letter, *"to further protect customers, ASX Clear (Futures) will be expected to make available an account structure that enables excess customer collateral to be held directly with the central counterparty"*<sup>5</sup>.

It is this requirement relating to the treatment of excess collateral, along with the protection and portability of specific collateral, which ASX now seeks to satisfy, utilising consultation feedback from customers. Excess collateral refers to both cash and non-cash collateral and we ask respondents to assess the intended use of each in their response to questions posed in this paper.

### 3.2 The Current ASX Clear (Futures) Default Process

In the event of a Clearing Participant's default, ASX has the power to transfer (or "port") open positions in an ICA, with collateral to the value of the associated initial margin requirement as at the last end-of-day calculation that the defaulting Clearing Participant successfully settled, to a non-defaulting Clearing Participant nominated by the ICA Client.

Under the current ASX Clear (Futures) client account structure, collateral is posted to ASX as margin by Clearing Participants, not by clients directly. Collateral posted to ASX as margin by the Clearing Participant on behalf of its clients will not necessarily be the same collateral which is posted as margin by clients to the Clearing Participant. Since Clearing Participants will post collateral to ASX in respect of a single initial margin obligation for all client accounts maintained by them (the operationally commingled aspect of a pooled account, which is also referred to as LSOC in the US), ASX will not be able to determine which excess collateral, or non-cash collateral (if any), originated with which client.

As excess collateral is not identifiable for porting, it will remain in the pooled client collateral account and may be used by ASX to offset

- losses incurred by ASX upon close-out or termination of positions in any client account of the defaulting Clearing Participant that exceed the initial margin requirement in respect of the account; and
- shortfalls in the liquidated value of non-cash or cross-currency collateral as a consequence of insufficient collateral haircuts.

ASX will return any remaining excess collateral to the external administrator of the defaulting Clearing Participant.

Upon a Clearing Participant default, ASX will liquidate any non-cash collateral in order to realise the initial margin requirement calculated by ASX in respect of each client account. ASX will, where possible, port the positions in an ICA and the cash value of initial margin associated with the positions to an alternate Clearing Participant nominated by the client, or close out positions and return residual cash value, less any losses, costs and expenses, to the client if porting is not possible.

Modifications to the current default process may need to be made in the event of adding new account types. Potential amendments would be outlined in the second consultation paper.

Collateral will continue to be posted to the CCP via the Clearing Participant<sup>6</sup>. A Clearing Participant may require a client in an ICA to provide additional margin, which is retained by the Clearing Participant, however, such additional margin would not be protected under an enhanced account structure unless Pass Through Collateral Rules applied and this additional margin was passed on to ASX.<sup>7</sup>

### 3.3 Risks

As the level of asset protection each segregation model affords over another will be a key consideration, it is important to outline the key risks that should be assessed when comparing degrees of segregation and portability.

<sup>5</sup> Please see [www.rba.gov.au/payments-system/clearing-settlement/pdf/supplementary-guidance-domestic-derivatives-ccps.pdf](http://www.rba.gov.au/payments-system/clearing-settlement/pdf/supplementary-guidance-domestic-derivatives-ccps.pdf) p6

<sup>6</sup> ASX Collateral is presented as a service to automate this function in Section 6.

<sup>7</sup> The Clearing Participant is usually required by law to keep monies paid as additional margin and not passed onto ASX in a segregated account for the benefit of those clients.

Risk Type	Description
Default Risk	Collateral lodged by Clearing Participants or Clients with the CCP is at risk if a CCP goes into default through insolvency, receivership, liquidation or a similar proceeding.
Transit Risk	The risk associated with a Clearing Participant defaulting while collateral is being transferred from the Client to the CCP via their Clearing Participant. Should a Clearing Participant default before the collateral is transferred by the Clearing Participant to the CCP it would not have the same level of protection as if it were held at the CCP.
Replacement Risk	The risk associated with the Client lodging one form of collateral, but another form of collateral is provided to their Alternate Clearing Participant or returned to the Client by the CCP. Replacement risk can occur when a Clearing Participant delivers substituted collateral to the CCP, or where the CCP only attributes Collateral Value and does not identify a specific Collateral Asset as belonging to a specific Client. <sup>8</sup>
Fellow Customer Risk	The risk that a client does not receive full value for its collateral due to losses arising from another client at the same Clearing Participant. Collateral or specific assets are not held separately for the benefit of an individual client either at the Clearing Participant or CCP.

### 3.4 Client Feedback

ASX has been working with the Australian investment community to develop a client clearing solution for OTC Interest Rate Derivatives. Nine major Australian fund managers and state government treasuries, which collectively manage around \$750 billion representing almost 40% of total Australian investor funds under management, were directly involved in the development of the ASX ICA structure. One of the overarching requirements that this group proposed was for ASX Clear (Futures) to have a direct relationship with end clients through the CCP rules structure. Clients felt that this would provide them with greater certainty of their rights (and obligations) in relation to the CCP in the instance of a Clearing Participant default. This has been achieved through the new client clearing rules implemented in February 2014.

ASX has identified the following additional key service design priorities from this client forum:

- collateral held in Australia;
- clearing house collateral holding arrangements governed by Australian law;
- operational support and risk management focused on the Australian time zone;
- increased certainty of portability;
- margin and collateral efficiency (for example, collateral eligibility and portfolio margining with ASX 24 ETDs); and
- a client account structure and associated arrangements which is operationally and commercially viable for Clearing Participants and clients.

Feedback from bilateral engagement across the asset management community has suggested that the full protection of assets, and their traceability, is highly valued, yet the actual costs associated with the implementation and maintenance of enhanced protection models will influence the buy-side's willingness to opt for enhanced segregation.

Costs to the client will also vary between segregation models. Inputs into the pricing model are likely to include the following.

<sup>8</sup> This risk is often cited as a key concern for Fund Managers where they are required to operate within client mandates and investment policies that dictate the assets types the Fund/Trust can hold along with portfolio asset allocation and asset duration targets. ASX calculates valuation haircuts against eligible non-cash collateral and would in essence bare the losses in such a liquidation event. Client losses arising from potential tax implications or other liquidation costs should be considered under this risk.

- Costs from the ASX and the Clearing Participant to support new models;
- Operational costs around the number of wire payments or asset transfers;
- Collateral funding considerations;
- Capital costs to Clearing Participant s/clients/clients of clients; and/or
- Impacts to CCP and Clearing Participant revenue streams.

The trade-off between cost and risk protection is therefore likely to be central to any choice of CCP client account structures. ASX's approach to client account segregation should also, to the extent possible, be consistent with international practice and foreign regulatory requirements.

## 4 Account Structure Models

Having established the background for, and the risks associated with segregation and portability, this paper will now present a synopsis of the various account structures available. We will present these considering the degree of protection and likelihood of portability afforded, ranging from "low", to "high" protection. In addition we provide a summary of the likely benefits and risks within each structure. We ask respondents to assess the level of complexity of each model in terms of the implementation and maintenance for Clearing Participants and clients, and to evaluate the risks and costs associated, with each structure.

### 4.1 Individual Client Account (ICA) with Excess

#### 4.1.1 Value Attribution (Applies to cash and non-cash collateral)

The first logical step in the progression towards enhanced protection and portability, beyond the initial ASX Client Clearing account structure would be an extension of the service to an ICA with Excess style account structure. Under ICA with Excess, Clearing Participants would continue to lodge cash and non-cash collateral with ASX through the pooled client collateral account for that Clearing Participant. ASX would implement a reporting mechanism for Clearing Participants to advise the total collateral value pertaining to each client sub-account (ICA or Omnibus). A report would be transmitted to the CCP on, at least, an end-of-day basis. Excess collateral could be readily identified by ASX and therefore protected for the benefit of the client during a Clearing Participant default.

It is worth noting replacement risk arises here where non-cash collateral is posted to the Clearing Participant and either transformed or passed on to the CCP. The Clearing Participant is advising the value of that client's collateral, and may advise a value where a Clearing Participant haircut is applied.

While the ICA with Excess structure increases the likelihood of excess collateral portability, the level of protection is still limited to the positions and value of a client's collateral, as specified by the Clearing Participant. Client collateral will be liquidated so that its value can be ported; specific securities will not be ported. It is this factor which separates the ICA with Excess structure from the structures offering the recognition/segregation of actual client assets.

#### Advantages

- Identification of excess value and increased likelihood of portability of the excess.
- Costs of legal and operational implementation less than asset attribution and full segregation.

#### Disadvantages

- A potential cost premium in the implementation and administration, over the current ICA without Excess structure.
- Collateral continues to be held in a pooled client collateral account at the CCP.
- Collateral valuation rests with the Clearing Participant, which may include a valuation haircut, where non-cash collateral posted. Collateral value may vary from collateral posted by the client.

### 4.1.2 Asset Attribution (Applies to non-cash collateral)

An alternative to the value attribution model is an account structure which aims to identify and track the non-cash collateral provided by the client. It takes the margin identification mechanism under the value attribution model a step further by booking the non-cash collateral (within the pooled client collateral account) for the client at the CCP level.

Under Asset Attribution

- The clearing house holds one pooled client collateral account in the clearing participant's name; and
- Identifies the ownership of the assets within that account using its own books and records.

This model would heighten the level of account management required from the Clearing Participant and the CCP. The mechanism by which the assets are identified and tracked, and where the responsibility for identification/tracking exists (with either the Clearing Participant or CCP), would need to be determined. ASX does not intend to track cash collateral, if it were to implement this structure.

ASX would potentially look at the use of Austraclear in order to realise these efficiencies.

#### Advantages

- A booking entry at CCP level identifies physical collateral with likelihood of portability of the specific asset increased.
- In the event of Clearing Participant default, the collateral the client posted is the collateral that is ported or received back.

#### Disadvantages

- Assets are held in a pooled client collateral account with the CCP, and are only segregated within the books and records of the CCP.
- A potential cost premium in the implementation and administration, over a value attribution model.

## 4.2 Full Asset Segregation (Applies to cash and non-cash collateral)

The Full Asset Segregation model may provide a further level of protection, over the "with excess" asset identification models, in that cash and non-cash collateral is segregated from those of the Clearing Participant and other clients. Collateral is not held in a pooled client collateral account. The physical segregation of collateral may be made to an account held at the CCP, or at an account held by a third party. Physical segregation of client non-cash collateral may be achieved via a Clearing Participant, directly to the CCP or via a CSD or custodian, as explained below.

### 4.2.1. Physical Segregation via Clearing Participant (for non-cash collateral)

Under this scenario the client's assets are physically segregated from the collateral of the Clearing Participant and those of other clients, but the physical segregation process will still be directed at the CCP via the Clearing Participant's instructions. Some models of note include the following.

- Individual Client Collateral Account - Working with their Clearing Participant and the CCP, the client would request the CCP to move the collateral value of the assets from the pooled client collateral account of the Clearing Participant, to an account referencing the client's ICA. The movement of collateral would be daily and the CCP would provide a daily report to the Clearing Participant and client reflecting the market value of the client's assets on deposit.
- Use of a Central Securities Depository (CSD) via a Clearing Participant – Clients would lodge assets with their Clearing Participant which would then be passed through to the CCP's CSD for an account segregated for that client. The introduction of pass through agreements for immediate transit of client collateral from the Clearing Participant to the CCP may be required in this process.

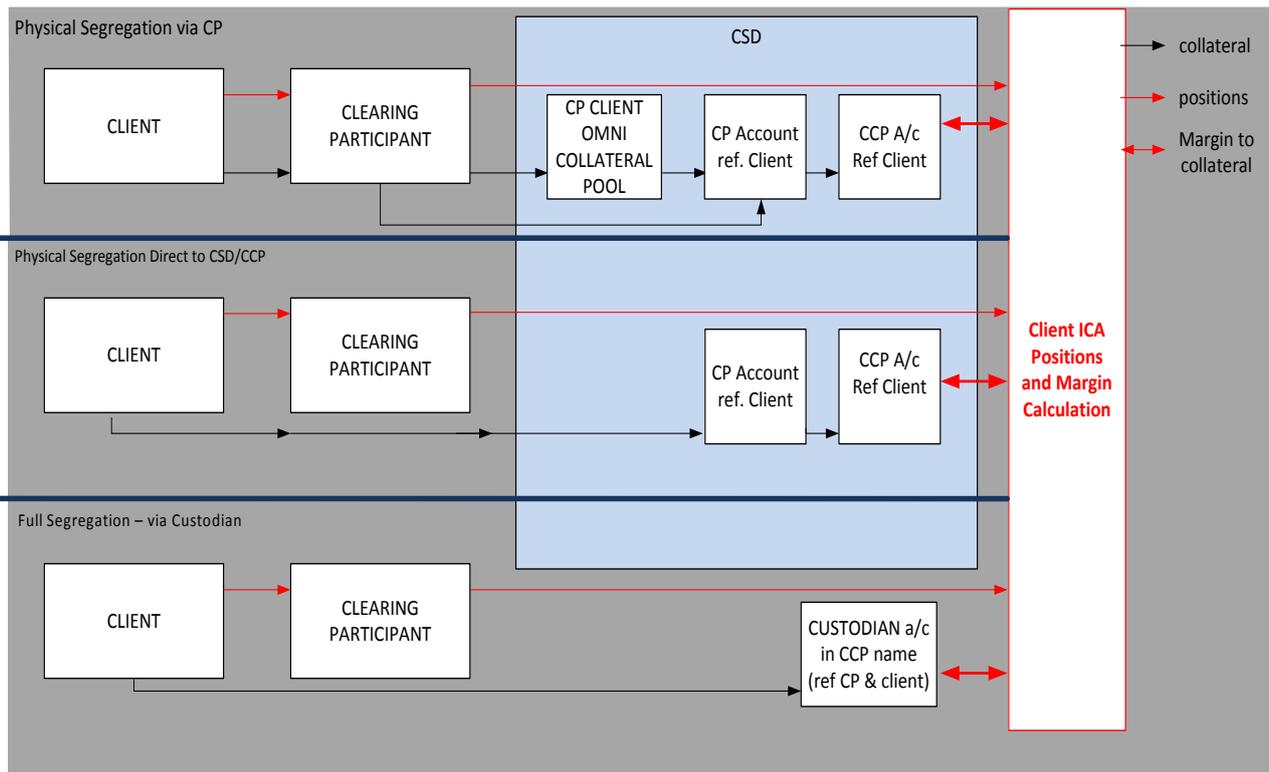
**4.2.2. Physical Segregation Direct to CSD/CCP (for non-cash collateral)**

Under this scenario the client’s assets are physically segregated from the collateral of the Clearing Participant and those of other clients, with the client lodging non-cash collateral directly with the CSD. This removes the Clearing Participant from the collateral lodgement process, and therefore eliminates transit risk.

The CSD account may be maintained referencing an ICA or as a pooled client collateral account, referencing a number of client ICAs. The client provides collateral directly to the CSD account, with margin obligations being settled by the client.

**4.2.3 Physical Segregation direct to Custodian (so-called “quad party”) (for non-cash collateral)**

The client lodges non-cash collateral directly into an account held with a custodian in the CCP’s name (but referable to the client and Clearing Participant). The non-cash collateral recorded in the account is subject to arrangements protecting it against the CCP’s insolvency, for example, the grant of security by the CCP in favour of a security trustee for the benefit of the relevant client and Clearing Participant.



**Advantages**

- Assets are physically segregated from those of the Clearing Participant and other clients.
- In the event of Clearing Participant default, the collateral the client posted is the collateral that is ported or received back.

**Disadvantages**

- Costs from Clearing Participant and CCP may increase around the design implementation and maintenance. Additional costs from CSD and custodians may eventuate.
- Further documentation may be needed– agreements between Client, Clearing Participant, CCP and Custodian.

## Account Model Summary

	ICA with Excess		Full Segregation
	Position and Value attribution	Position and Asset Attribution	
<b>Summary</b>	CCP calls gross margin across accounts and positions. Clearing Participant provides reporting which attributes the value of cash and non-cash collateral to each client	CCP call gross margin across accounts and positions. Non-cash collateral is attributed to clients (rebooked) at the CCP	CCP calls gross margin across accounts and positions. CCP physically segregates cash and non-cash collateral of client (internally or externally)
<b>Collateral Held by</b>	CCP	CCP	CCP or external custodian
<b>Collateral Account</b>	Clearing Participant pooled client collateral account at CCP	Clearing Participant pooled client collateral account at CCP but booked to client at the CCP	Individual client collateral account at CCP or external custodian
<b>Collateral Form</b>	By client, by value	By client, physical asset	Physical asset
<b>Excess held at CCP</b>	Yes	Yes	Yes
<b>Position and collateral portability</b>	Yes (value)	Yes (physical asset)	Yes (physical asset) <sup>9</sup>

<sup>9</sup> The higher of the physical asset or the Initial Margin requirement will be ported.



## Summary of Risks

Risk Type	Description	ICA with Excess		Full Segregation
		Position and Value Attribution	Position and Asset Attribution	
Default Risk	Collateral lodged by Clearing Participants or Clients to the CCP are at risk if a CCP goes into default through insolvency, receivership, liquidation or a similar proceeding.	Still prevalent but potential to achieve bankruptcy remote from CCP via trust arrangements or operating rule changes		
Transit Risk	The risk associated with a Clearing Participant defaulting while collateral is transferred from the Client to the CCP via their Clearing Participant. Should a Clearing Participant default before the collateral is transferred by the Clearing Participant to the CCP it would not have the same level of protection as if it were held at the CCP.	Yes if collateral posted via Clearing Participant	Yes if collateral posted via Clearing Participant, eliminated if posted direct to CCP	
Replacement Risk	The risk associated with the Client lodging one form of collateral, but another form of collateral is provided to their Alternate Clearing Participant or returned to the Client by the CCP. Replacement risk can occur when a Clearing Participant delivers substituted collateral to the CCP, or where the CCP only attributes Collateral Value and does not identify a specific Collateral Asset as belonging to a specific Client. <sup>10</sup>	Still prevalent as collateral value is identified and not the physical asset itself.	Dependant on detailed design, eliminated where physical asset is identified.	Eliminated as physical asset is segregated and not value.
Fellow Customer Risk	The risk that a client does not receive full value for its collateral due to losses arising from another client at the same Clearing Participant.	Fellow customer risk is lower than omnibus client accounting for all individual client account structures. Each account proposal retains this benefit, with some additional considerations listed below.		
		Benefit may be tempered if the Clearing Participant provides the CCP with haircut value of client non-cash. Collateral still held in pooled client collateral account.	Collateral still held in pooled client collateral account.	If bankruptcy remoteness from the CCP is enabled under full segregation, fellow customer risk is reduced further.

<sup>10</sup> This risk is often cited as a key concern for Fund Managers where they are required to operate within client mandates and investment policies that dictate the assets types the Fund/Trust can hold along with portfolio asset allocation and asset duration targets.

#### 4.4 A brief note on the term Bankruptcy Remote

Collateral holding arrangements are often assessed with reference to assets being held in a manner that is “bankruptcy remote” from a client’s Clearing Participant or the Central Counterparty through which their trades are cleared (in either case, the “secured party”). Assets submitted by a client as collateral would generally be regarded as “bankruptcy remote” from a given secured party if the assets are held under arrangements that would prevent the assets being subject to (1) competing claims of (and, thus, distribution to) the secured party’s creditors generally or (2) loss due to the secured party’s default, including insolvency, so that the assets (or liquidation value of the assets) would be available for return to the client in the secured party’s insolvency.

The Basel Committee on Banking Supervision has provided risk weightings for bank exposures to Clearing Participants and CCPs under different bankruptcy remote scenarios, although no mandatory requirements have been placed on CCPs to provide bankruptcy remote collateral holding arrangements.

The collateral account structures outlined in this Consultation Paper aim to hold client collateral in a manner that is bankruptcy remote from the client’s Clearing Participant.

ASX will consult further on the implementation of collateral holding arrangements that are bankruptcy remote from the ASX CCPs as part of ASX’s CCP Recovery consultation process which is expected to commence in the second half of 2014.

#### 4.5 A brief note on capital requirements for bank exposures to CCPs

In July 2012 the Basel Committee on Banking Supervision (BCBS) released interim rules on *Capital requirements for bank exposures to central counterparties*.<sup>11</sup> This publication applies to bank Clearing Participants and bank clients of Clearing Participants and includes capital requirements for trade, posted collateral and default fund exposures to CCPs. The Australian Prudential Regulation Authority (APRA) incorporated these requirements into Prudential Standard APS 112.<sup>12</sup> This document applies to all ADIs under APRA’s regulatory remit and entered into force on 1 January 2013.

In April 2014 the BCBS released a revised policy framework for *Capital requirements for bank exposures to central counterparties*.<sup>13</sup> The BCBS’ intention is that these new requirements will replace the interim rules from 1 January 2017. As yet there has been no Australian transposition of the revised framework.

The above publications determine trade<sup>14</sup> and posted collateral exposures for bank clients of Clearing Participants based on the extent to which:

- collateral is held in a bankruptcy remote manner,
- clients are protected from the default or insolvency of their Clearing Participant and other clients, and
- trades will continue to be transacted through the CCP or by the CCP in the event of the Clearing Participant’s default.<sup>15</sup>

The enhanced protection models discussed in this paper provide varying degrees of protection in relation to the above factors. We would encourage stakeholders to consider the applicable capital implications when determining any preferred enhanced client segregation model.

<sup>11</sup> Please see [www.bis.org/publ/bcbs227.pdf](http://www.bis.org/publ/bcbs227.pdf)

<sup>12</sup> Please see [www.apra.gov.au/adi/PrudentialFramework/Documents/Basel-III-Prudential-Standard-APS-112-\(January-2013\).pdf](http://www.apra.gov.au/adi/PrudentialFramework/Documents/Basel-III-Prudential-Standard-APS-112-(January-2013).pdf)

<sup>13</sup> Please see [www.bis.org/publ/bcbs282.pdf](http://www.bis.org/publ/bcbs282.pdf)

<sup>14</sup> Please note that APRA has advised that it considers ASX Clear (Futures) to be a QCCP (please see [www.cfr.gov.au/publications/member-publications/pdf/letter-qccp-status-apra-response.pdf](http://www.cfr.gov.au/publications/member-publications/pdf/letter-qccp-status-apra-response.pdf)). The trade exposure analysis provided is based on this designation.

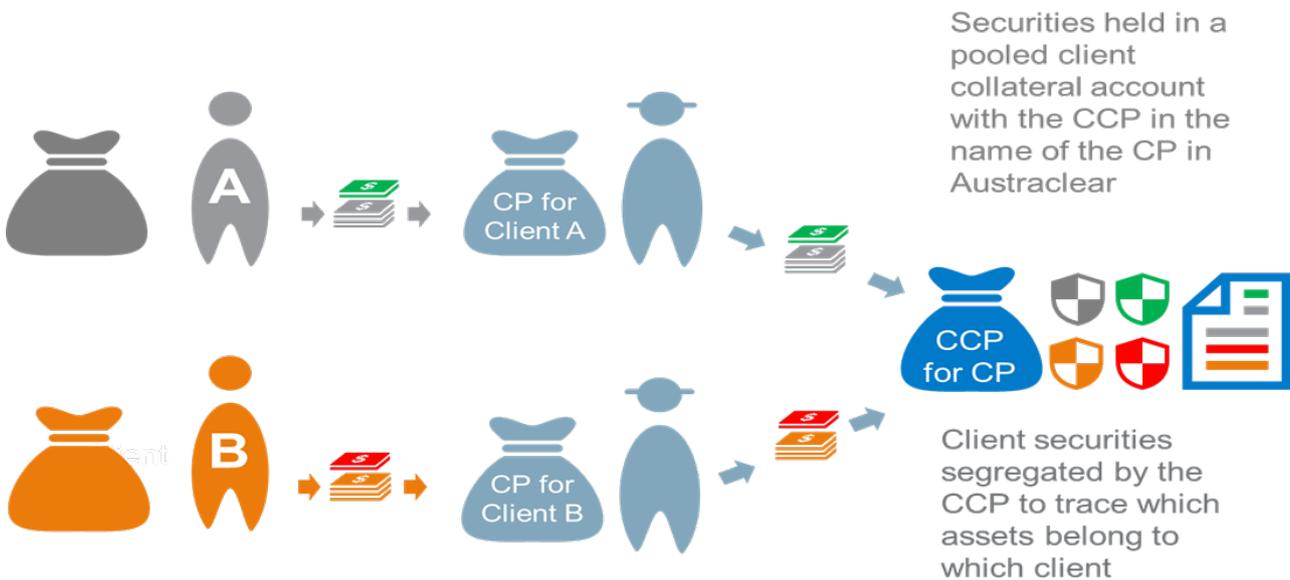
<sup>15</sup> In these circumstances the client’s positions and collateral with the CCP must be transferred at market value unless the client requests to close out the position at market value.

## 5 ASX Potential Solutions

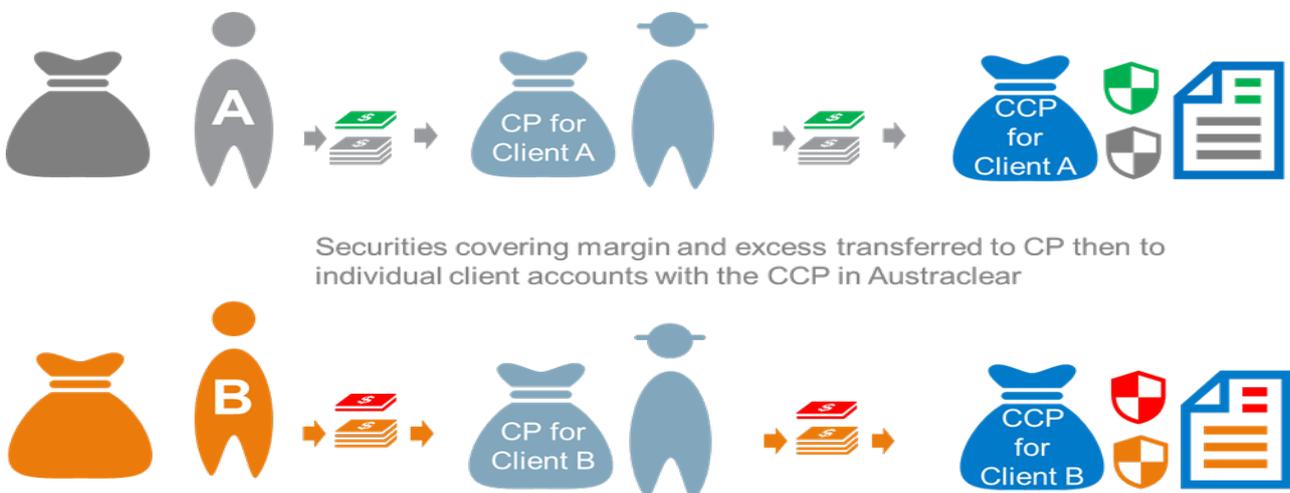
Depending upon client demand, ASX would potentially look to incorporate existing services and architecture into the solution for an account structure which protects specific non-cash securities used as collateral, or held as excess collateral by each individual client. The models presented below incorporate Austraclear (the external Australian CSD for fixed income securities), and the collateral management service ASX Collateral.

### 5.1 Using CSD (Austraclear) (for non-cash collateral)

**Variation 1 (asset attribution).** Under this scenario, when initial margin is called by the CCP, the client, Clearing Participant and CCP generate settlement instructions between their accounts for the outright transfer of securities. Settlement occurs in the external Australian CSD for fixed income securities known as "Austraclear". Securities are held by the CCP in a pooled client collateral account referable to the Clearing Participant. The CCP will maintain records booking non-cash collateral to individual clients.



**Variation 2 (full segregation).** Under this scenario, when initial margin is called by the CCP, the client, Clearing Participant and CCP, generate settlement instructions between their accounts for the outright transfer of securities. Settlement occurs in Austraclear. Securities are held in individual sub-accounts, physically segregating each client's securities whilst identifying the Clearing Participant.



Variation 2 (full segregation) has the following benefits over Variation 1 (asset attribution):

- End-to-end traceability: the securities originate in the client's account in Austraclear.
- Increased portability of specific non-cash securities in the event of Clearing Participant default.

### 5.2 Using ASX Collateral to move collateral at CSD (Austraclear) (for non-cash collateral)

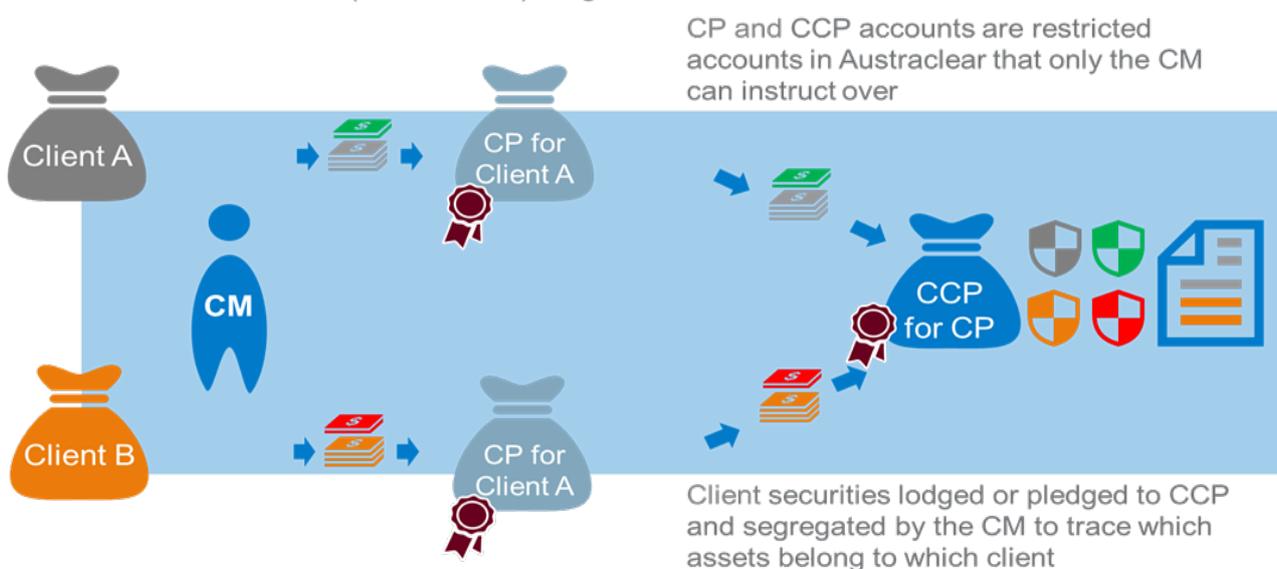
The CCP notifies ASX Collateral of the type of securities it will accept as collateral; its "Eligibility Profile". Initial margin is called and acknowledged between the client, the Clearing Participant and the CCP. The CCP notifies ASX Collateral of the Initial Margin Amount (as an "Exposure"). Upon receipt, ASX Collateral automatically creates settlement instructions to move eligible securities (that meet the CCP's Eligibility Profile) from the client's account, to the Clearing Participant's account then to the CCP's account all of which reside at the CSD. Settlement occurs in the CSD. The Clearing Participant's and the CCP's Austraclear accounts are "restricted accounts" known as "Transferred Collateral Accounts". Pursuant to Austraclear regulations, the only entity able to instruct settlement over these accounts is ASX Collateral pursuant to the terms of a Collateral Services Management Agreement that the CCP and the Clearing Participant will execute.

If ASX Collateral is used:

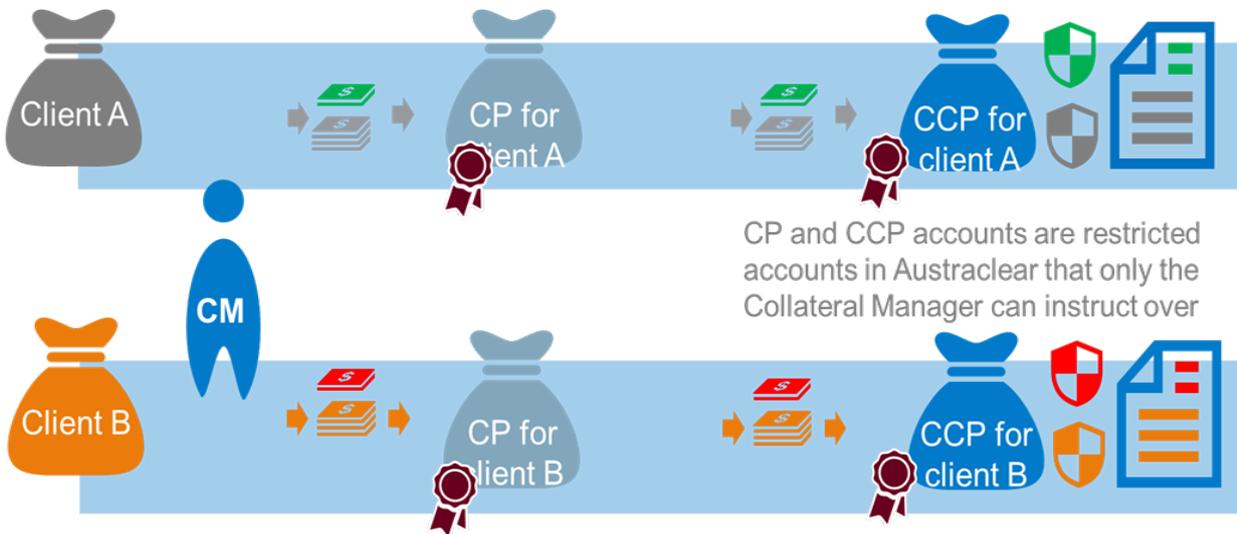
- collateral will be automatically selected and allocated in accordance with the counterparties' allocation preferences and eligibility profiles;
- the standard allocation is for ASX Collateral to allocate the lowest cost collateral that meets the CCP's eligibility profile;
- clients are able to substitute and recall collateral delivered, using ASX Collateral infrastructure; and,
- collateral will be optimised – including such substitutions and recalls – every 20 minutes.

**Variation 3 (asset attribution using ASX Collateral)** - Upon receipt of the exposure, ASX Collateral automatically creates settlement instructions to move eligible securities (that meet the CCP's Eligibility Profile) from the client's account, to the Clearing Participant's account to the CCP's pooled client collateral account at the CSD that references the Clearing Participant and in respect of which ASX Collateral is able to determine individual client collateral holdings.

#### Securities moved by the Collateral Manager (CM) between accounts in Austraclear in accordance with CSD (Austraclear) Regulations

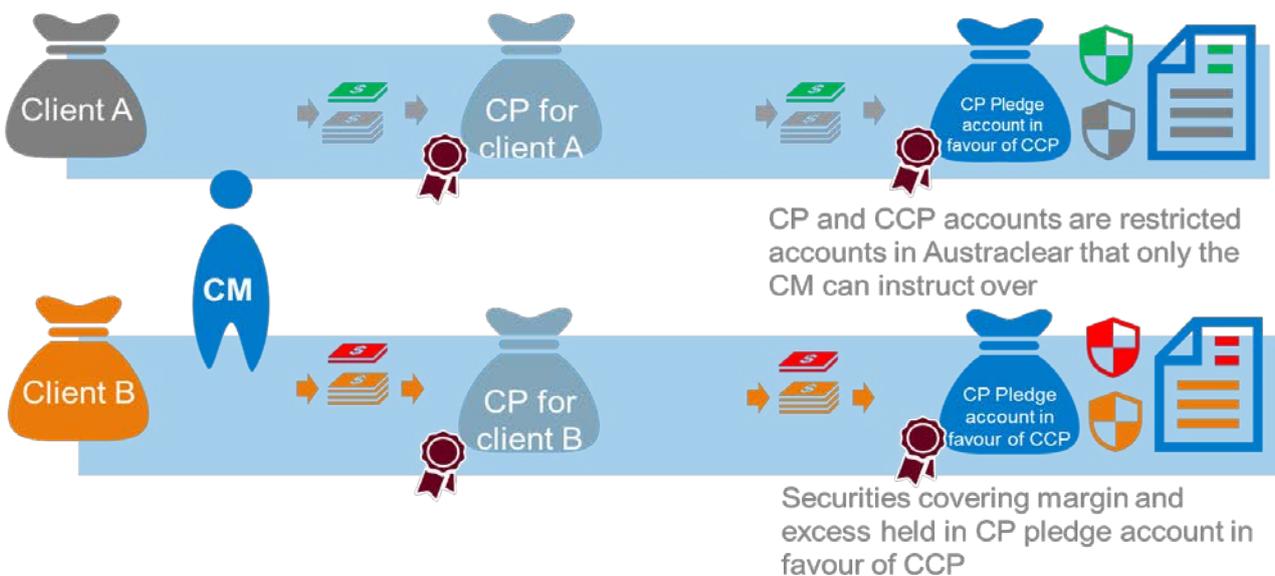


**Variation 4 (full segregation using ASX Collateral)** - Upon receipt of the exposure, ASX Collateral automatically creates settlement instructions to move eligible securities (that meet the CCP's Eligibility Profile) from the client's account, to the Clearing Participant's account to an individual CCP's account at the CSD that references the client for whom collateral is held.



**Variation 5 (full segregation via pledge account using ASX Collateral)** - Upon receipt of the exposure, ASX Collateral automatically creates settlement instructions to move eligible securities (that meet the CCP's Eligibility Profile) from the client's account, to the Clearing Participant's account to a Clearing Participant pooled client collateral pledge account at the CSD that references the CCP as the pledgor and in respect of which ASX Collateral is able to determine individual client collateral holdings.

Securities covering margin and excess moved by the Collateral Manager between accounts in Austraclear in accordance with the Austraclear Regulations



### Advantages of using ASX Collateral

- Automatic selection and allocation of securities
- Substitution and recall of collateral delivered
- Collateral optimisation
- Minimises transit risk

Note – The ASX proposed solutions above, identify the use of AUD denominated collateral. The lodgement of foreign currency cash and eligible foreign non-cash collateral as margin, is out of scope for the purposes of this consultation. Their inclusion in an enhanced protection structure may be addressed at a future date.

## 6 Next Steps

We would appreciate responses to the questions posed in attachment A in order to assess market preference for account structure models.

ASX seeks stakeholders' views on account structures that segregate (and increase the likelihood of porting) excess collateral by 22 August 2014. ASX will then assess this feedback to propose an account structure which most broadly meets the needs of market participants in consultation with ASX's regulators. This proposal, along with a rules framework pertaining to it, will be the subject of a second market consultation, due for release in Q4 2014.

## Attachment A - Questionnaire

Section	Question
<b>4 Account Structures (General)</b>	<b><i>Q1: Do market participants (either as potential clients or Clearing Participants of the ASX Clear (Futures)) have any regulatory capital treatment or regulatory obligations that require excess collateral to be held at the CCP? Please elaborate on any domestic and/or offshore drivers of these requirements</i></b>
<b>4 Account Structures (General) Q2</b>	<b><i>Q2: Do you have any regulatory capital treatment or regulatory obligations that require collateral to be held individually segregated at the CCP? Do these require segregation of collateral value or assets? Again, please elaborate on the drivers of this requirement</i></b>
<b>4.1.1 ICA with Excess Value Attribution Q3</b>	<b><i>Q3: Taking into account efficiencies in the posting of cash collateral to meet margin requirements, is the identification and protection of excess collateral a priority for Australian market participants?</i></b>

<p><b>4.1.1 ICA with Excess Value Attribution Q4</b></p>	<p><b>Q4: Where a Clearing Participant calls margin from an individually segregated client account in excess of that called from the Clearing Participant by the CCP, should the Clearing Participant be required to pass the additional margin to the CCP? If not, what alternative approaches would provide the client with protection in the circumstances of a Clearing Participant default?</b></p>
<p><b>4.1.1 ICA with Excess Value Attribution Q5</b></p>	<p><b>Q5: If the Clearing Participant is required to post excess initial margin to ASX Clear (Futures), should ASX implement Pass-Through collateral rules where the CP is legally required to immediately pass-through collateral provided by the Client to ASX (thereby reducing Transit Risk)?</b></p>
<p><b>4.1.1 ICA with Excess Value Attribution Q6</b></p>	<p><b>Q6: What challenges and costs do Clearing Participants and Clients envisage in the implementation of the ICA with Excess Structure? Please consider design, technological, ongoing operational, reporting and legal costs. As a Clearing Participant how do you envisage recovering these costs?</b></p>
<p><b>4.1.1 ICA with Excess Value Attribution Q7</b></p>	<p><b>Q7: Where non-cash collateral is lodged with the CP under a valuation attribution model, should that CP comply with rules when valuing a client's assets? If so, what rules should be applied? Who should set these rules?</b></p>



<p><b>4.1.2 ICA with Excess Asset Attribution Q8</b></p>	<p><b>Q8: Do market participants (either as potential clients or Clearing Participants of the ASX Clear (Futures)) see value in the tracking (and booking at CCP level), of collateral assets over the mere identification of collateral value?</b></p>
<p><b>4.1.2 ICA with Excess Asset Attribution Q9</b></p>	<p><b>Q9: Would clients be prepared to pay a premium for full segregation (from increased costs of implementation and administration) over the Pooled Collateral Client Account for the tracking of assets? Is asset attribution an interim solution before full segregation? Are there potential reconciliation issues or risks around traceability with asset attribution?</b></p>
<p><b>4.2 Full Segregation Q10</b></p>	<p><b>Q10: What aspects of the various Full Segregation models are required to meet your segregation needs?</b></p>
<p><b>4.2 Full Segregation Q11</b></p>	<p><b>Q11: What specific benefits does full segregation provide to the client over a pooled client collateral account where assets are tracked (asset attribution)?</b></p>

<p><b>4.2 Full Segregation Q12</b></p>	<p><b>Q12: Do Market Participants see value in segregating collateral from the CCP (i.e. employing a third party custodian)? Please consider the costs associated with further documentation, and additional workloads/cost in administration.</b></p>
<p><b>4.2 Full Segregation Q13</b></p>	<p><b>Q13: Do you see a requirement for collateral to be held bankruptcy remote from the CCP, at some point in the future?</b></p>
<p><b>5 ASX Collateral Q14</b></p>	<p><b>Q14: Should ASX incorporate ASX Collateral into its enhanced protection model or should it be optional, alongside an Austraclear solution?</b></p>
<p><b>General Q15</b></p>	<p><b>Q15: Do Market Participants favour:</b></p> <ul style="list-style-type: none"> <li>- ICA with Excess value attribution?</li> <li>- ICA with Excess asset attribution?</li> <li>- Full Segregation of physical assets?</li> </ul>

<b>General Q16</b>	<b>Q16: Based on your response to above, what additional documentation would need to be executed?</b>
<b>General Q17</b>	<b>Q17: Are there any other feasible alternative models to consider?</b>
<b>General Q18</b>	<b>Q18: Are there any additional risks that we have missed?</b>

## Attachment B - Costing Estimate

ASX would appreciate if Clients and Clearing Participants alike could submit their fee expectations with regard to each structure presented. Clients are asked how much they would be willing to pay over the current ICA without excess service launch, while CP's are asked how much more they would potentially charge for each service. For example, a client may be willing to pay 10% more for an ICA with excess model over ICA without Excess. We appreciate there are various factors influencing an estimate (please list those where possible), and all responses will be treated commercial in confidence by ASX.

	ICA with Excess		Full Segregation
	Position and value attribution	Position and asset attribution	
Client (% increase in fees willing to pay for structure)			
Clearing Participant (% estimated increase in fees for providing each structure)			
Clearing Participant (\$ estimated increase in annual implementation costs to provide new account structure)			
Clearing Participant (\$ estimated increase in annual operating costs to administer the new account structure)			