Public Quantitative Disclosure Standards for Central Counterparties ASX Clear Pty Limited

September 2015



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Introduction

Overview

ASX Clear Pty Limited (ASX Clear) is the central counterparty (CCP) for the clearing of shares, warrants and exchange-traded funds traded on ASX Trade or via an Approved Market Operator (AMO).

As the central counterparty, the Clearing House becomes the seller to every buyer and the buyer to every seller, making it liable for completing all cleared transactions on the relevant market. This occurs through a contractual process known as novation, in accordance with the operating rules of the Clearing House.

Standard and Poor's (S&P)

ASX has obtained an S&P issuer credit rating for ASX Clear. S&P has assigned an AA- long-term and A1+ short-term credit rating to ASX Clear. The rating outlook on the long-term issuer credit rating is stable.

European Securities and Markets Authority (ESMA) recognition

The European Market Infrastructure Regulation ("EMIR") was adopted by the European Parliament on 4 July 2012. Under EMIR, a CCP established outside of the European Union may continue to provide clearing services to clearing members established in the European Union only if ESMA recognises the CCP as a 'third-country CCP'. In addition, under the European Capital Requirements Directive IV ("CRD IV"), European banks are permitted to apply concessional risk weightings to their group's novated exposures to CCPs if they are "Qualifying CCPs". To become a Qualifying CPP, a CCP established outside the European Union must obtain recognition as a 'third country CCP' under EMIR.

ASX Clear obtained recognition as a "third-country CCP" from ESMA with effect from 27 April 2015. Two important steps to obtaining such recognition were:

- (i) the adoption by the European Commission of its equivalence decision for Australia's regulatory regime on 30 October 2014; and
- (ii) the signing of a Memorandum of Understanding relating to cooperation between ASIC, RBA and ESMA on 27 November 2014.

Background

The CPSS-IOSCO *Principles for financial market infrastructures* (PFMI) states that financial market infrastructures (FMIs) should provide relevant information to participants, relevant authorities and the broader public.

Quantitative data is an important components of the set of public disclosures that is expected of FMIs as part of satisfying the PFMI.

Purpose of the disclosures

The disclosures are intended to support the objectives of enabling stakeholders, including authorities, participants (direct, indirect and prospective) and the public, to:

• compare Central Counterparty (CCP) risk controls, including their financial condition and financial resources to withstand potential losses;

- have a clear, accurate and full understanding of the risks associated with a CCP (in accordance with Principle 23, Key Consideration 5);
- understand and assess a CCP's systemic importance and its impact on systemic risk in all jurisdictions
 and currency areas for which it provides services, from which it has material membership or in which
 there are linked infrastructures; and
- understand and assess the risks of participating in CCPs (directly, and, to the extent relevant, indirectly).

Principle 23 states that FMIs should, at a minimum, disclose "basic data" on transaction volumes and values. Principle 23 also states that FMIs should disclose data on their financial condition, their financial resources to withstand potential losses, the timeliness of settlements, and other performance statistics. They should disclose sufficient information for participants and prospective participants to understand fully the risks of participating in the system. This disclosure is expected to be to the public rather than restricted to participants or members.

Frequency and type of disclosure

The matrix below details the quantitative disclosures as required in the Public Quantitative disclosure standards for central counterparties.

These standards can be accessed via the following link. http://www.bis.org/cpmi/publ/d125.htm

For each standard that requires a quantitative disclosure the matrix will display the following information:

- The principle number;
- The requirement of that principle (as specified in the standards);
- The quantitative disclosure as it applies to the CCP¹;
- The frequency period of updating this disclosure; and
- The period for which this disclosure relates

The common templates (csv files) and supporting documentation can be accessed via the following link:

http://www.asx.com.au/regulation/regulatory-compliance/asx-clear.htm

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¹ All values are shown in millions (m) in this document and provided in Australian dollars unless otherwise indicated

Principle 4 - Credit Risk

Requirement

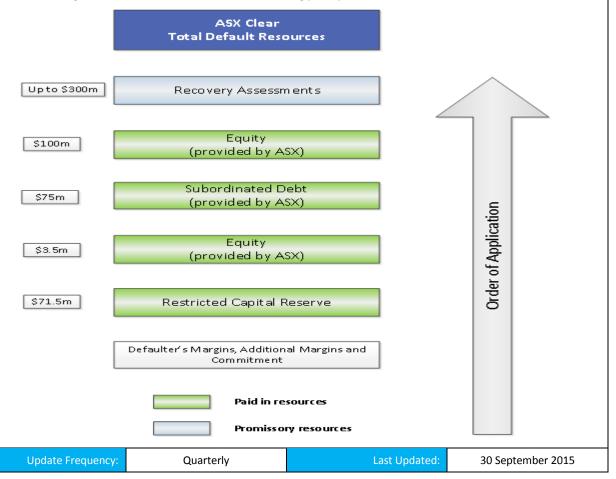
- 4.1 Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service, split by:
 - (a) pre-funded
 - i. own capital that forms part of the default waterfall (further split by whether used before, alongside, or after, member contributions)
 - ii. aggregate participant contributions (both amount required and post-haircut amount posted, where different)
 - iii. other
 - (b) committed
 - i. own/parent funds that are committed to address a participant default (or round of participant defaults)
 - ii. aggregate participant commitments to address an initial participant default (or initial round of participant defaults)
 - iii. aggregate participant commitments to replenish the default fund to deal with a subsequent participant default (or round of participant defaults) after the initial participant default (or round of participant defaults) has been addressed
 - iv. other

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

ASX Clear has total default resources of up to \$550m. This is comprised of a paid in default fund that has \$250m paid in resources from ASX and the ability to call on a recovery assessment from its participants of up to \$300m².

In the event of a participant default, the Clearing House will use the margins of the defaulting participant together with any additional Initial Margins that had been collected from the defaulting participant.



² This takes into account the changes in the default resources affected through the ASX Recovery Rulebook which came into effect on 1 October 2015. In addition, ASX and the participants must replenish up to \$150m of the default fund if the default fund is utilised as a result of one or more participant defaults during a default period.

Requirement

4.2 KCCP

Kccp need only be reported by those CCPs which are, or seek to be, a "qualifying CCP" under relevant law.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

The **KccP** is a hypothetical capital requirement for a CCP, calculated for the purpose of determining the capital requirement on bank clearing member default fund contributions. A CCP's hypothetical capital requirement is driven by its counterparty credit risk exposures from its clearing members.

The KCCP does not represent the actual default resources for a CCP (the actual default resources are determined by the CCP's supervisor). As a qualifying CCP, ASX is required to calculate the default resources on bank clearing member default fund contributions on a monthly basis.

The Kccp (Hypothetical capital) for ASX Clear as at 30 September 2015 was \$0.2m compared to actual default resources held of \$250m.

Update Frequency: Quarterly Last Updated: 30 September 2015

Requirement

- 4.3 Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by:
 - Cash deposited at a central bank of issue of the currency concerned
 - · Cash deposited at other central banks
 - Secured cash deposited at commercial banks (including reverse repo)
 - · Unsecured cash deposited at commercial banks
 - Non-cash
 - · sovereign government bonds
 - o domestic
 - o other
 - agency bonds
 - state/municipal bonds
 - corporate bonds
 - equities
 - commodities
 - o gold
 - o other (please describe)
 - mutual funds / UCITs
 - other (please provide explanation of type of asset)

Amounts should be reported both pre-haircut (i.e. at market value) and at post-haircut value.

Disclosure

Pre-funded default resources of \$250m (repayable upon demand) are provided in cash from ASX. These funds together with margins from ASX Clear and ASX Clear (Futures), default fund contributions lodged by participants of ASX Clear (Futures) and the CCPs own funds are combined into one portfolio and invested into various assets through a Trust.

As the default resources cannot be individually assigned to specific asset classes, a general allocation has been made based on the proportion of the default resources to the total portfolio and this % has been applied to each asset class.

Investment	Pre Haircut	Post Haircut
Cash		
Cash deposit at central bank of issue of currency	0.1	0.1
Unsecured cash deposit at commercial banks	85.7	85.7

Investment		Pre Haircut	Post Haircut
Non- Cash			
State / municipal bonds		7.8	7.8
Corporate Bonds (Bank issued bonds)		9.6	9.6
Corporate Bonds (Floating Rate Notes)		52.2	52.2
Other – Corporate Discount Securities (NCD's)		94.6	94.6
	Total	250.0	250.0

Update Frequency:	Quarterly	Last Updated:	30 September 2015

Requirement

- 4.4 1) State whether the CCP is subject to a minimum "Cover 1" or "Cover 2" requirement in relation to total pre-funded default resources.
 - 2) For each clearing service, state the number of business days within which the CCP assumes it will close out the default when calculating credit exposures that would potentially need to be covered by the default fund.
 - 3) For each clearing service, what is the *estimated* largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any *single* participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?
 - 4) Report the number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in excess of initial margin) and by how much.
 - 5) For each clearing service, what was the *actual* largest aggregate credit exposure (in excess of initial margin) to any *single* participant and its affiliates (including transactions cleared for indirect participants)?
 - 6) For each clearing service, what is the **estimated** largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any **two** participants and their affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?
 - 7) Report the number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in excess of initial margin) and by how much.
 - 8) For each clearing service, what was the *actual* largest aggregate credit exposure (in excess of initial margin) to any *two* participants and their affiliates (including transactions cleared for indirect participants)?

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Ref	Result	
1)	ASX Clear is subject to a "Cover 2" requirement	
2)	ASX Clear assumes that it will close out a default within 3 business days	
3)	,	54.8 55.1
4)	The peak amount in the previous 12 months of \$164.8 did not exceed the pre-funded default resou \$250.0	rces of
5)		31.2 50.4

6)		n the previous 12 months (Cove r the previous 12 months (Cove	•	\$198.6 \$107.2
7)	The peak amount \$250.0	n the previous 12 months of \$1	98.6 did not exceed the pre-funded	default resources of
8)	Peak day amount in the previous 12 months (Cover 2) Mean average over the previous 12 months (Cover 2)		\$45.9 \$8.0	
		<u> </u>	, 	<u> </u>
	Update Frequency:	Quarterly	Last Updated:	30 September 2015

Principle 5 – Collateral

Requirement

5.1 Assets eligible as initial margin, and the respective haircuts applied

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Subject to approval and on such conditions as ASX Clear may determine from time to time, the following may be provided in respect of margin:

Instrument	Approved Cover		Valuation Haircut	Provided for
Cash Cover	AUD Cash	6%	N/A if lodged against margin on an Exchange product denominated in the currency of the cover	Initial Margin Additional Initial Margin
	Specific Cover		N/A	
	S&P / ASX 200 Securities	30%		Initial Margin
	SPDR S&P / ASX 200 ETF	14%		
Cash Equities	Bank Guarantees (only in exceptional circumstances and with the prior approval of ASX Clear)	N/A		Initial Margin

Please refer to the link below for a list of acceptable Cash Equity securities and their relevant haircuts.

http://www.asx.com.au/regulation/regulatory-compliance/asx-clear.htm

 Update Frequency:
 When changes made
 Last Updated:
 30 September 2015

Requirement

Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)

Disclosure

The ASX Clear default resources do not contain any pre-funded participant contributions.

Update Frequency: When changes made Last Updated: 30 September 2015

Requirements

- 5.3 Results of testing of haircuts please state the:
 - 1. confidence interval targeted through the calculation of haircuts
 - 2. assumed holding/liquidation period for the assets accepted,
 - 3. look-back period used for testing the haircuts,
 - 4. the number of days during the look-back period on which the fall in value during the assumed holding/liquidation period exceeded the haircut on an asset.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Back testing of Collateral haircuts is performed on a quarterly basis covering the previous 12 months.

Ref	Item	Result
1	Confidence Interval Targeted	99%
2	Assumed Holding / Liquidation Period	3 days business days
3	Look-back Period	261 days business days
4	Number of days exceeded the Haircut	27*

*Note – The 27 breaches were over 52,200 observations giving a coverage of 99.95%

Update Frequency: Quarterly Last Updated: 30 September 2015

Principle 6 – Margin

Initial Margin

Requirement

6.1 For each clearing service, total initial margin *required*, split by house and client (or combined total if not segregated)

For each clearing service, state whether initial margin for the positions of indirect participants must be provided for each indirect participant's own position (gross), or for the net position of a group of indirect participants ("net" or "net omnibus")

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

ASX Clear faces each clearing participant as principal (e.g. House) for all Cash Equities transactions:

Туре	AUD (m)
Cash Equities - House (Gross)	\$172.1
ETO - House (Gross)	\$218.0
ETO – Client (Gross)	\$882.4

Update Frequency: Quarterly Last Updated: 30 Septe	uency: Quarterly	st Updated: 30 September 2015
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Requirement

6.2 For each clearing service, total initial margin *held*, split by house and client (if segregated).

For each of the overall house and client totals (or for just the overall total posted, if house and client are not segregated), the amounts of:

- Cash deposited at a central bank of issue of the currency concerned
- Cash deposited at other central banks
- Secured cash deposited at commercial banks (including reverse repo)
- · Unsecured cash deposited at commercial banks
- Non-cash
 - sovereign government bonds
 - o domestic
 - o other
 - agency bonds
 - state/municipal bonds
 - · corporate bonds
 - equities
 - commodities
 - o gold
 - o other
 - mutual funds / UCITs
 - other (please provide explanation of type of asset)

Amounts should be reported both pre-haircut (i.e. at market value) and at post-haircut value.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Cash margins and default fund contributions lodged by participants of ASX Clear and ASX Clear (Futures) and the CCPs own funds are combined into one portfolio and invested into various assets through a Trust.

As the initial margins cannot be individually assigned to specific asset classes, a general allocation has been made based on the proportion of the initial margin lodged to the total portfolio and this % has been applied to each asset class.

This table also includes any excess collateral that has been lodged by any of the clearing participants.

Quarterly

	House		Clie	Client	
Investments	Pre Haircut	Post Haircut	Pre Haircut	Post Haircut	
Cash					
Cash deposit at central bank of issue of currency	0.1	0.1	0.1	0.1	
Unsecured cash deposit at commercial banks	146.9	146.9	119.8	119.8	
Non-Cash					
State / municipal bonds	13.4	13.4	10.9	10.9	
Corporate Bonds (Bank issued bonds)	16.4	16.4	13.3	13.3	
Corporate Bonds (Floating Rate Notes)	89.4	89.4	72.8	72.8	
Equities	8.2	5.8	810.9	567.6	
Other – Corporate Discount Securities (NCDs)	161.9	161.9	131.9	131.9	
Other - Bank Guarantees	0	0	4.9	4.9	
Total	436.3	433.9	1,164.6	921.3	

Last Updated:

30 September 2015

	Requirement				
6.3	Initial margin rates on individual contracts, where the CCP sets such rates				
	[Refer to the explanatory note at the end of this document for additional details]				
	Disclosure				
	Refer to the link below for the ASX Clear SPAN margin parameters and Cash Market margin parameters				
	http://www.asx.com.au/regulation/regulatory-compliance/asx-clear.htm				
	Update Frequency:	When changes made	Last Updated:	30 September 2015	

Requirement

- Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service key parameters including, but not limited to:
 - i) single-tailed confidence level targeted;
 - (ii) sample/data look-back period for calibrating the model;
 - (iii) adjustments or scalars or weighting, if any, applied to historical data (e.g. to reflect changes in volatility);
 - (iv) close-out/holding periods by product (or, if varying, contract type);
 - (v) for risk aggregation models, the margin rate per contract and details of the offsets between different contracts [e.g. for SPAN style models this might include inter-month spread charges and inter-contract spread credits];
 - (vi) the frequency of parameter reviews.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Ref	Item	SPAN (Derivatives)	HSVaR (Equities)
(i)	Single-tailed confidence level targeted	99.7%	99.7%

Ref	Item	SPAN (Derivatives)	HSVaR (Equities)
(ii)	sample/data look-back period for calibrating the model	1 Year	HSVaR = 502 days Flat Rate = 1 Year
(iii)	Adjustments, scalars or weighting	Not strictly formulaic. Multiple lookback periods considered incorporating both short and long term periods (60, 120 business days and 12 months).	HsVaR contributions for securities are calculated on 99% confidence interval and then a portfolio add on factor of 30% is added to construct a reliable estimate of the desired 99.7% margin coverage.
	fo re		The "add on" factor is applied to account for statistical uncertainty and construct a reliable estimate of the desired 99.7% margin coverage.
(iv)	Close-out / holding Periods	3 Days	HSVaR = Top 500 = 1 day Flat Rate ASX Top 200 = 1 day Flat Rate ASX Next 300 = 2 day Flat Rate Interest Rate Securities = 3 days Flat Rate Warrants = 3 days Flat Rate Non-All Ordinaries = 3 days
(v)	Offsets between different contracts	http://www.asx.com.au/regulation/regulatory-compliance/asx-clear.htm	http://www.asx.com.au/regulation/regula ory-compliance/asx-clear.htm
	Frequency of reviews	Monthly	Quarterly

Requirement

- Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service:
 - (a) Number of times over the past twelve months that margin coverage held against any account fell below the actual marked-to-market exposure of that member account based on daily back-testing results*
 - (b) Number of observations (i.e. number of accounts multiplied by number of days covered in the back test)
 - (c) Achieved coverage level, i.e. [(b) (a)]/(b)
 - * Specify if measured intraday/continuously or only once a day. If once a day, specify at what time of day. Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size of uncovered exposure.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Ref	ETO's	Cash Market
(a)	2,666	23
(b)	2,299,539	8,606
(c)	99.9%	99.7%
Peak	\$2.7m	\$7.4m
Average	\$0.0m	\$1.0m

Update Frequency: Quarterly Last Updated: 30 September 2015

Margin Calls

	Requirement			
6.6	Average total variation margin paid to the CCP by participants each business day.			
	[Refer to the explanatory note at the end of this document for additional details]			
	Disclosure			
	Average total variation margin paid to the CCP by participants each business day over the quarter. \$60.9m			
	Update Frequency:	Quarterly	Last Updated:	30 September 2015

	Requirement			
6.7	Maximum total variation margin paid to the CCP on any given business day over the period.			
	Disclosure			
	Maximum total variation margin paid to the CCP on any given business day over the quarter. \$277.2m			
	Update Frequency:	Quarterly	Last Updated:	30 September 2015

		Requirement			
6.8	Maximum aggregate initial margin call on any given business day over the period.				
	Disclosure				
	Maximum aggregate initial margin call on any given business day over the quarter. \$121.7m				
	Update Frequency:	Quarterly	Last Updated:	30 September 2015	

Principle 7 - Liquidity Risk

Requirement

7.1 State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.

Size and composition of qualifying liquid resources for each clearing service (or at aggregate CCP level if not managed at clearing service level) – for each relevant currency – split by:

- (a) Cash deposited at a central bank of issue of the currency concerned
- (b) Cash deposited at other central banks
- (c) Secured cash deposited at commercial banks (including reverse repo)
- (d) Unsecured cash deposited at commercial banks
- (e) secured committed lines of credit (i.e. those for which collateral/security will be provided by the CCP if drawn) including committed foreign exchange swaps and committed repos;
- (f) unsecured committed lines of credit (i.e. which the CCP may draw without providing collateral/security);
- (g) highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements even in extreme but plausible market conditions;
- (h) other (please specify).

State whether the CCP has routine access to central bank liquidity or facilities.

If, in using qualifying liquid resources the CCP is required or allowed to give priority to meeting certain payment obligations, please provide or reference:

- · the schedule of payments or priority for allocating payments, if such exists;
- any applicable rule, policy, procedure, and governance arrangement around such decision making.

Disclosure

As all cash received from both clearing houses together with the CCPs own funds are combined into one portfolio and invested into various assets through a Trust, a general allocation has been made based on the proportion of the portfolio lodged by each clearing house to the total portfolio and this % has been applied to the relevant asset class.

ASX Clear maintains sufficient liquid resources for Cover 2.

Investments	Value (m)
Cash deposited at central bank of issue of the currency	0.2
Secured cash deposited at commercial banks (including reverse repo)	0
Unsecured cash deposited at commercial banks	102.1
Highly marketable collateral held in custody & investments that are readily available and convertible into cash	703.0
Total	805.3

Any cash reinvestments are only in RBA eligible securities and ASX Clear is not required to give priority in meeting payment obligations

ASX Clear has a committed standby (undrawn) liquidity facility of \$150m. This comprises of \$50m from ASX Limited and a further \$100m from ASX Limited backed by a commercial bank line.

For Cash Equities, in the event of a Clearing Participant default ASX also has the ability to enter into an Offsetting Transaction Arrangement (OTA) for any outstanding payment obligation with a non-defaulting Clearing Participant. It is expected that available resources would first be injected but, if it is not possible or prudent to rely solely on available liquidity, ASX could utilise OTAs.

Update Frequency:	Quarterly	Last Updated:	30 September 2015

Update Frequency:

7.2 Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources above. [Refer to the explanatory note at the end of this document for additional details] Disclosure There are no supplementary liquidity risk resources beyond what has been detailed in principle 7.1 for ASX Clear.

Requirement

Last Updated:

30 September 2015

7.3 For each clearing service (or at the aggregate CCP level if not managed at clearing service level):

Quarterly

- 1) What is the *estimated* largest same-day and, where relevant, intraday and multiday payment obligation in total that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?
- 2) Report the number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much.
- 3) What is the *actual* largest intraday and multiday payment obligation of a single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months?
- 4) What is the *estimated* largest same-day and, where relevant, intraday and multiday payment obligation *in each relevant currency* that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions?
- 5) Report the number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Ref	Result
1)	\$825.9m*
2)	53 days \$118.1m
3)	Peak \$204.8m
4)	\$1,435.4m*
5)	66 days \$503.4m

* Would be covered by available liquidity including the use of the Offsetting Transaction Arrangements (refer 7.1)

Update Frequency: Quarterly Last Updated: 30 September 2015

Principle 12 – Exchange of Value Settlement System

Requirement

12.1 | Percentage of settlements by value effected using a DvP, DvD or PvP settlement mechanism

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Only Cash Equities transactions are settled through a Delivery vs. Payment (DvP) settlement mechanism as Exchange Traded Options are settled via the margining process.

Cash Equities transactions are novated to the Clear immediately after bid/offer matched on the trading platform, or (for reported trades) transaction is recorded by the market operator³. Then on the evening of Trade Date +1 (T+1) the novated transactions are netted⁴ per security for settlement on T+3.

The balance of transactions include the movement of stock between clearing participants and their clients to facilitate the settlement of the DvP transactions.

Туре	Percentage
DvP	33.83%
DvD	N/A
PvP N/A	

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Requirement

12.2 Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanism

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

Only Cash Equities transactions are settled through a Delivery vs. Payment (DvP) settlement mechanism as Exchange Traded Options are settled via the margining process.

Cash Equities transactions are novated to the Clear immediately after bid/offer matched on the trading platform, or (for reported trades) transaction is recorded by the market operator. Then on the evening of Trade Date +1 (T+1) the novated transactions are netted per security for settlement on T+3.

The balance of transactions include the movement of stock between clearing participants and their clients to facilitate the settlement of the DvP transactions

Percentage	
23.71%	
N/A	
N/A	

Update Frequency: Quarterly Last Updated: 30 September 2015

³ In either case the transaction must subsequently be submitted to ASX Clear and validated for eligibility, if the transaction is eligible for clearing, the transaction is novated with effect from this point, if it is not, the transaction is rejected.

⁴ Excluding Broker / Broker transactions that have been novated but isolated from netting due to a corporate action etc.

Principle 13 – Default Rules and Procedures

Requirement

- 13.1 CCPs are encouraged, subject to legal constraints on timing and content, to disclose as soon as practicable quantitative information related to defaults, such as:
 - Amount of loss versus amount of initial margin
 - Amount of other financial resources used to cover losses
 - Proportion of client positions closed-out/ported

Appropriate references to other published material related to the defaults may also be helpful.

Disclosure

There were no ASX Clear Clearing Participant defaults in the quarter to 30 September 2015.

Refer to the following link for an overview on default management:

http://www.asx.com.au/services/clearing/default-management.htm

Update Frequency: Ad Hoc Last Updated: 30 September 2015

Principle 14 – Segregation and Portability

Requirement

- 14.1 Split, by clearing service, of total client positions held in:
 - (a) individually segregated accounts;
 - (b) omnibus client-only accounts, other than LSOC accounts (see below);
 - (c) legally segregated but operationally comingled (LSOC) accounts;
 - (d) comingled house and client accounts;

as a share of notional values cleared or of the settlement value of securities transactions.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

ASX Clear operates a principal to principal model for Cash Equities and Exchange Traded Options.

For Exchange Traded Options ASX Clear has an account structure that provides each client with an individual segregated accounts, whereas for Cash Equities all positions are registered into the name of the Clearing Participant e.g. there is no look through to their underlying clients.

Ref	Result
(a)	100% (1)
(b)	0
(c)	0
(d)	N/A (2)

(1) Relates to Exchange Traded Options only

(2) Refer to the comments above regarding Cash Equities

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Principle 15 – General Business Risk

	Requirement			
15.1	(a) Value of liquid net assets funded by equity (b) Six months of current operating expenses [Refer to the explanatory note at the end of this document for additional details]			
	Disclosure			
	Capital to cover General Business Risk is held at the holdings company level and not the individual clearing house.			
	Update Frequency: Annual Last Updated: 30 June 2015			

		Requir	ement	
15.2	Financial disclosures: including, bu	ut not limited to,		
	 total revenue, total expenditure, profits, total assets, total liabilities. Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet.			
	Disclosure			
	ASX Clear has entered into an arrangement which a related entity for the provision of operational services and assets in exchange for an assignment of clearing fees. Accordingly ASX Clear does not have any meaningful revenues or expenses within the entity. The total assets and liabilities of ASX Clear are provided below and relate primarily to the entity's own capital and collateral lodged			
	by participants. Total Assets \$1,123.4m Total Liabilities \$944.0m			
	Update Frequency:	Annual	Last Updated:	30 June 2015

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	Requirement Requirement				
15.3	Income breakdowns: • percentage of total income that comes from fees related to provision of clearing services; • percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants.				
	Disclosure				
	Clearing fees for derivatives are bundled with trading and settlement fees. All these fees are assigned to a related entity as disclosure in 15.2 above				
	Update Frequency:	Annual	Last Updated:	30 June 2015	

Principle 16 – Custody and Investment Risk

	Requirement			
16.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution			
	Disclosure Disclosure Disclosure			
	\$728.3 received from ASX Clear Clearing Participants as Initial Margin.			
	Note – There are no Clearing Participant contributions in the ASX Clear default fund.			
	Update Frequency:	Quarterly	Last Updated:	30 September 2015

Requirement

- How the total cash received from participants (i.e. the combined total of initial margin and default fund contributions in 16.1) is held/deposited/invested, including:
 - percentage of this total participant cash held as cash deposits (including through reverse repo); further split into:
 - percentage held:
 - o as cash deposits at central banks of issue of the currency deposited;
 - o as cash deposits at other central banks;
 - o as cash deposits at commercial banks; of which:
 - o percentage secured (including through reverse repo);
 - o percentage unsecured;
 - o in money market funds;
 - o in other forms (please specify).
 - percentage split by currency of these cash deposits (including reverse repo) and money market funds local currency, USD, EUR, other

Also:

- weighted average maturity of these cash deposits (including reverse repo) and money market funds
- percentage of this total participant cash invested in securities; further split into:
 - percentage invested in
 - sovereign government bonds; of which:
 - o domestic;
 - o other;
 - agency bonds;
 - state/municipal bonds;
 - o other instruments (please describe);
 - percentage split by currency of these securities local currency, USD, EUR, other.

Also:

• weighted average maturity of these securities

Provide an estimate of the risk on the investment portfolio (excluding central bank and commercial bank deposits) (99% one-day VaR, or equivalent)

State if the CCP investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit.

State the number of times over the previous quarter in which this limit has been exceeded.

Disclosure

Margins and default funding lodged by participants of ASX Clear and ASX Clear (Futures) and the CCPs own funds are combined into one portfolio and invested into various assets.

As the total cash received from Participants cannot be individually assigned to specific asset classes, a general allocation has been made based on the proportion of the cash received from Participants to the total portfolio and this % has been applied to each asset class.

nvestment		Percentage
Central bank of issue of the currency deposited		0.02%
Unsecured cash deposits at commercial banks		34.33%
% of total participant c	ash held as cash deposits (incl. reverse repo):	34.35%
State / municipal bonds		3.14%
Corporate Bonds (Bank issued bonds)		3.83%
Corporate Bonds (Floating Rate Notes)		20.87%
Other – Corporate Discount Securities (NCDs)		37.81%
% o	of total participant cash invested in securities:	65.65%
Neighted average maturity of these securities (WAM)		99.94 days
Estimated risk on the Investment portfolio (VaR = 2 day holding	g period calculated at 99% confidence)	\$306,605
Counterparty	Limit (\$) per Counterparty*	
Australian Government Unlimited		
Major Australian Deposit-taking Institution \$775m		
State Government \$400m		
Supra-Nationals	\$300m	
Other Australian Deposit-taking Institution \$200m		

Note – No limits were breached during the previous quarter.

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Requirement

- 16.3 Rehypothecation of participant assets (i.e. non-cash) by the CCP where allowed, split by initial margin and default fund:
 - total value of participant non-cash rehypothecated;
 - maturities (overnight/one day; over one day and up to one week; over one week and up to one month; over one month and up to one year; over one year and up to two years; over two years);

The value of participants' non-cash collateral re-hypothecated as at quarter end was nil as re-hypothecation of collateral is not permitted.

Update Frequency:	Quarterly	Last Updated:	30 September 2015

Principle 17 - Operational Risk

Requirement

17.1 Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

ASX Clear has four core systems for the settlement and margining of products.

- The Clearing house Electronic Sub-Register System (CHESS) for clearing and settlement of Cash Equities;
- The Derivatives Clearing System (DCS) for the clearing of Exchange Traded Options (ETOs);
- RAZOR for the margining of Cash Equities products; and
- SPAN for the margining of ETOs

ASX Clear – Core Systems		
System Availability Target		
CHESS (Clearing) 99.80%		
DCS (Clearing)	99.80%	
RAZOR (Margining) 99.80%		
SPAN (Margining)	99.80%	

Update Frequency:	Quarterly	Last Updated:	30 September 2015

Requirement

17.2 Actual availability of the core system(s) over the previous twelve month period.

Disclosure

All ASX Clear core systems have had 100% availability over the last 12 months

ASX Clear – Core Systems		
System	Availability	
CHESS (Clearing)	100.00%	
DCS (Clearing)	100.00%	
RAZOR (Margining)	100.00%	
SPAN (Margining)	100.00%	

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Update Frequency:	Quarterly	Last Updated:	30 September 2015

Requirement

17.3 Total number and duration of failures affecting the core system(s) involved in clearing over the previous twelve month period

Disclosure

There have been no failures with the ASX Clear core systems for the last 12 months

ASX Clear – Core Systems				
System	Number of Failures	Duration (Mins)		
CHESS (Clearing)	0	0		
DCS (Clearing)	0	0		
RAZOR (Margining)	0	0		
SPAN (Margining)	0	0		

Update Frequency:	Quarterly	Last Updated:	30 September 2015

		Requi	rement		
7.4	Recovery time objective(s) (e.g. v	within two hours)			
		Disc	losure		
	All ASX Clear core systems are su	bject to a 2 hour recovery time	objective.		
		ASX Clear – Core Systems			
	System	Recovery Tir	ne Objective		
	CHESS (Clear	CHESS (Clearing) 2 Hours			
	DCS (Clearing	g) 2 H	ours		
	RAZOR (Marg	gining) 2 H	ours		
	SPAN (Margi	SPAN (Margining) 2 Hours			
	Update Frequency:	Quarterly		Last Updated:	30 September 2

Principle 18 – Access and Participation requirements

Requirements

- 18.1 Number of clearing members, by clearing service, split by:
 - category of membership (e.g. direct clearing member, general clearing member);
 - type of participant (central bank, CCP, bank, other); and
 - · domestic or foreign participants.

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

On ASX Clear there are two categories of Clearing Participants, "Direct: and "General":

"Direct Participant" means a Participant which is admitted by ASX Clear to clear a category of Market Transaction for itself, its own Clients and Market Participants that are Wholly-Owned Group Entities and their clients.

"General Participant" means a Participant which is admitted by ASX Clear to clear a category of Market Transaction for itself, its own Clients, other Participants and their Clients and Market Participants and their Clients.

Category of Membership	Type of Participant	Domestic	Foreign
Direct	Bank	0	0
Direct	Bank Subsidiary	5	0
Direct	Investment Bank	7	0
Direct	Other	12	0
Direct	Inactive / Suspended	3	0
	Total Direct Participants	27	0
General	Bank	1	0
General	Bank Subsidiary	6	0
General	Investment Bank	2	0
General	Other	1	0
General	Inactive / Suspended	0	0
	Total General Participants	10	0
	Grand Total	37	0
Jpdate Frequency:	Quarterly	Last Upda	ted: 30 Septembe

Requirement

18.2 For each clearing service with ten or more members, but fewer than 25 members:

Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate

For each clearing service with 25 or more members:

- Percentage of open positions held by the largest five and ten clearing members, including both house and client, in aggregate

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

As detailed in 18.1 at the time of the update ASX Clear had 37 Clearing Participants. Percentage of open positions held by the largest five and ten clearing participants were:

	Largest 5 Clearing Participants	Largest 10 Clearing Participants
Cash Equities - Average	41%	68%
Cash Equities - Peak end of day	46%	74%
ETO – Average	65%	84%
ETO – Peak end of day	66%	85%

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Requirement

- 18.3 For each clearing service with ten or more members, but fewer than 25 members:
 - Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate

For each clearing service with 25 or more members:

Percentage of initial margin posted by the largest five and ten clearing members, including both house and client, in aggregate

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

As detailed in 18.1 at the time of the update ASX Clear had 37 Clearing Participants. Percentage of initial margin held by the largest five and ten clearing participants were:

	Largest 5 Clearing Participants	Largest 10 Clearing Participants
Cash Equities - Average	43%	66%
Cash Equities - Peak end of day	64%	81%
ETO – Average	54%	80%
ETO – Peak end of day	60%	82%

Update Frequency: Quarterly	Last Updated:	30 September 2015
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Requirement

- 18.4 For each segregated default fund with ten or more members, but fewer than 25 members:
 - Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate

For each segregated default fund with 25 or more members:

Percentage of participant contributions to the default fund contributed by largest five and ten clearing members in aggregate

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

At the time of the update the ASX Clear default fund of \$250m contained no ASX Clear Clearing Participant contributions.

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Principle 19 – Tiered Participation arrangements

Requirement 19.1 Measures of concentration of client clearing: 1. Number of clients (if known) 2. Number of direct members that clear for clients 3. Per cent of client transactions by clearing service (by total gross notional for derivatives or total cleared value of securities transactions or similar) attributable to the top five clearing members (if the CCP has ten or more clearing members) and top ten clearing members (if the CCP has 25 or more clearing members) [Refer to the explanatory note at the end of this document for additional details] **Disclosure** 42 ASX Market Participants that clear through a direct member 2. 8 Direct members clear for the above Top 5 = 41%3. Top 10 = 46% **Update Frequency:** Quarterly Last Updated: 30 September 2015

Principle 20 – FMI Links

Interoperability

		Requir	ement		
20.1	Value of trades cleared through each link, by clearing service — as a share of total trade values/total notional values cleared in that service				
	[Refer to the explanatory note a	t the end of this document for ad	ditional details]		
Disclosure					
	ASX Clear has the following FMI	Links:			
	ASX Settlement Pty LirAustraclear Limited	mited; and			
	ASX Clear does not transact thro	ough either of these FMI Links.			
	Update Frequency:	Quarterly	Last Updated:	30 September 2015	
		Requir	ement		
20.2	Initial margin or equivalent finar linked CCP on contracts cleared		nked CCP by the CCP to cover the	potential future exposure of the	
		Disclo	osure		
	Not Applicable				
	Update Frequency:	Quarterly	Last Updated:	30 September 2015	
		Requir			
20.3		ncial resources <i>collected from</i> ead (at market value and post-haircut	ch linked CCP to cover potential fu c)	iture exposure to the linked CCP	
		Disclo	osure		
	Not Applicable				
	Update Frequency:	Quarterly	Last Updated:	30 September 2015	
		Requir	ement		
20.4	Results of back-testing of cover minimum this should include:	rage of initial margin or equivale	nt financial resources on trades	cleared through each link. At a	
	(a) Number of times over the past twelve months that coverage provided by margin and equivalent financial resources has against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – based on daily back tes results*				
			d by number of days covered in the ed intraday/continuously or only o		
		Disclo	osure		
	Not Applicable				
1	Update Frequency:	Quarterly	Last Updated:	Quarterly	

	Requirement					
20.5	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources <i>provided to</i> each linked CCP, that are available to the linked CCP to cover exposures to the CCP and whether part of, additional to, or separate from the standard default fund (please specify)					
	Disclosure					
	Not Applicable					
	Update Frequency:	Quarterly	Last Updated:	30 September 2015		

	Requirement					
Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources <i>collected from</i> ear CCP, that are available to the CCP to cover exposures to the linked CCP and whether part of, additional to, or separate financial resources <i>collected from</i> earlier standard default fund (please specify)						
	Disclosure					
	Not Applicable					
	Update Frequency: Quarterly Last Updated: 30 September 2015					

Cross Margining

	Requirement				
20.7	(a) Value of trades subject to cross margining, by clearing service, as a percentage of total trade values/total notional values cleared(b) Reduction in total initial margin held by the CCP as a result of cross margining, as a percentage of total initial margin that would otherwise have been held.				
	Disclosure				
	Not Applicable				
	Update Frequency:	Quarterly	Last Updated:	30 September 2015	

Principle 23 – Disclosure of Rules, Key Procedures and Market Data

Requirement

23.1 Average daily volumes and notional values of new trades cleared, by instrument/asset class, by currency, and split by OTC or exchange-traded

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

As at the reporting date ASX Clear only cleared Exchange Traded instruments. The metrics below are based on the novated settlement instructions with a settlement date between 01-July-2015 and 30-September-2015.

Exchange Traded Instrument	Volume (k)	Value (m)
Equities	968.3	4,569.3
Structured Products	1.4	8.9
Interest Rate Hybrid	0.4	9.0
Exchange Traded Funds	2.6	66.9
Australian Government Bonds	0.0	0.4
Company Options	0.2	0.6
Exchange Traded Options	375.0	n/a

Update Frequency:	Quarterly	Last Updated:	30 September 2015

Requirement

23.2 Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions per instrument/asset class and currency and split by OTC or exchange-traded

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

As at the reporting date ASX Clear only cleared Exchange Traded instruments. The metrics below are based on the novated settlement instructions with a settlement date between 01-July-2015 and 30-September-2015.

Exchange Traded Instrument	Value (m)
Equities	12,455.2
Structured Products	33.3
Interest Rate Hybrid	32.4
Exchange Traded Funds	190.9
Australian Government Bonds	0.8
Company Options	1.6

Update Frequency:	Quarterly	Last Updated:	30 September 2015
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Requirement

23.3 Average daily volumes and notional contract values submitted by each execution facility or matching/confirmation venue

[Refer to the explanatory note at the end of this document for additional details]

Disclosure

For Cash Equities the metrics below are based on the novated settlement instructions with a settlement date between 01-July-2015 and 30-September-2015.

For Exchange Traded Options the metrics are based on number of contracts traded.

Execution Facility	Cash Equities Average Daily Volume	Cash Equities Average Daily Value	Exchange Traded Options Average Daily Volume	Exchange Traded Options Average Daily Value
ASX Trade	769.8	4,024.6	0.37	Not Available
CHI-X Australia	198.4	544.6	Not Applicable	Not Applicable

and the second second			
Update Frequency:	Quarterly	Last Updated:	30 September 2015

Principle by Principle Notes

Below are the principle by principle notes provided as part of the Public Quantitative Disclosure Standards for Central Counterparties

Principle 4: Credit risk

Item 4.1: This item seeks disclosure of default resources that are available to cover a member default should the margin or equivalent (for example sums paid in by participants to cover their options liabilities) paid by participants to cover their own liabilities to the CCP prove insufficient.

4.1(a)(i) should be identical to DFCCP as defined in BCBS 282.4 Where the CCP's own capital forms part of the default waterfall and potentially covers multiple clearing services with separate segregated default funds, the CCP will have to allocate its capital contribution to each of the segregated funds in proportion to the respective product-specific exposure at default in line with BCBS 282.

4.1(a)(ii) should be identical to DFCM as defined in BCBS 282.

Where commitments in section 4.1(b) are unlimited, state that these are unlimited. Commitments that are reserved to replenish the CCP's own capital or equity should not be included here, i.e. 4.1(b)(ii) and 4.1(b)(iii) seek disclosure of commitments to replenish the CCP's default fund, not the CCP's own capital or equity. Rules-based agreements to accept variation margin or other gains-based haircuts should not be disclosed as commitments, but CCPs should disclose details of such arrangements in line with the guidance on recovery planning (see CPMI-IOSCO *Recovery of financial market infrastructures*, October 2014).

Item 4.2: For a definition of KCCP, see BCBS 282. KCCP may be reported more frequently than quarterly if a CCP is required, under relevant law, to report it to supervisors of clearing members more frequently than quarterly.

Item 4.3: Disclosures should be based on the form in which default resources are held, not the form in which they were paid to the CCP. This item requests disclosures 'as at quarter end'. If a CCP does not consider the composition of collateral at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges. CCPs are also encouraged to disclose any limits on the amount of collateral of a particular type that the CCP will accept if this will assist in enabling a clear understanding of risks. For CCPs which do not specifically record whether asset holdings correspond to default fund contributions (whether provided by CCP participants or from the CCP's own funds) or to margin provided by participants, the CCP should provide an explanatory note to this effect, and explain its methodology for describing the form in which default fund contributions are held (for example by assuming the proportion of each asset accounted for by default fund is pro-rata to the proportion of total funding that comes from default fund contributions.

Item 4.4: This item is where the results of a CCP's stress-testing of its financial resources are expected to be disclosed. CCPs should specify in their supporting comments to the matrix whether they are subject to a "Cover 1" or "Cover 2" requirement in relation to their total pre-funded default resources, but should report both results so that both Cover 1 and Cover 2 metrics can be compared with actual default resources. These disclosures create no new regulatory obligation for CCPs subject to a Cover 1 requirement to also satisfy a Cover 2 requirement. The disclosures instead aim to support transparency between the CCP and its participants on how safety and efficiency considerations have been balanced in response to different stress scenarios and the decisions that have been made with regard to default fund coverage. Where a CCP is only required to meet a Cover 1 standard, providing disclosure also on its estimated cover 2 requirement may facilitate additional comparisons across CCPs. Nevertheless, because of certain factors, including the size of the market the CCP serves, the CCP's share of that market, and whether a small number of participants account for a disproportionate amount of the CCP's clearing activity, comparison between cover 1 and cover 2 metrics alone

will still give an incomplete comparison of relative default fund coverage. Accordingly, CCPs should provide a comparison with default resources – as in item 4.3, market share data – in accordance with part 23 of the matrix, and other clarifying remarks, as appropriate, alongside their disclosure related to Cover 1 and Cover 2 metrics to further help the reader understand the default fund coverage.

In order to aid clearing members' modelling of their exposures to the CCP, the CCP should consider disclosing further information on its default fund stress-testing methodology (e.g. underlying model parameters and assumptions) insofar as the CCP, in discussion with its participants and regulators, agrees is appropriate without providing confidential information about individual participant positions.

Principle 5: Collateral

Item 5.1: CCPs are encouraged to explain where concentration limits or charges are also applied in addition to normal haircuts. Recognising that the CCP is requested to disclose changes to haircut values as they are applied, where CCPs already publish information on haircuts elsewhere on their public website, a link to the relevant pages will satisfy the disclosure expectation.

Item 5.3: CCPs should consider adding explanatory notes if this would help to understand reasons why the fall in value of assets exceeded haircuts.

Principle 6: Margin

Separate disclosures should be made for each clearing service in respect of items 6.1, 6.2, and 6.5, and each margin model used in that clearing service in respect of 6.3 and 6.4. Disclosures should be on the basis of the form in which the margin is held by the CCP rather than the form in which it was provided by the participants (if different).

Item 6.1: In this item, CCPs should report initial margin required – at least at the level of each clearing service. CPMI and IOSCO acknowledge that practices for calculating initial margin requirements vary across CCPs, and propose that CCPs include all types of margin including 'base-line' initial margin; 'add-ons'; and 'retained MTM/VM' (where relevant). Items included under 'add-ons' should reflect any additions to margin required from base-line initial margin and routine scheduled collections – e.g. margin requested to cover specific risks (including, but not limited to liquidity risk, concentration risk, correlation risk, wrong-way risk) where these risks are not covered in the base-line calculation or margin requested on a 'non-routine' basis (e.g. ad-hoc intraday calls). Where add-ons to baseline initial margin are significant and variable, CCPs are encouraged to provide an explanatory note to this effect. CCPs are also encouraged to provide an explanatory note on the expiration period of products they clear where this would help to facilitate interpretation of the margin data, e.g. because margin is returned on or following particular contract expiration dates.

Item 6.2: Disclosures under this item should reflect the total value of initial margin actually *posted* by direct and indirect members and held by the CCP (as opposed to item 6.1, which asks for the total value of initial margin *required*). This should include initial margin provided through a security interest as well as through title transfer. For CCPs which do not specifically record whether asset holdings correspond to margin or default fund contributions fund (whether provided by CCP participants or from the CCP's own funds), the CCP should provide an explanatory note to this effect, and explain its methodology for describing the form in which margin is held (for example by assuming the proportion of each asset accounted for by margin is pro-rata to the proportion of total funding from margin contributions).

Items 6.1 and 6.2: If a CCP does not consider disclosures at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Items 6.3 and 6.4: CPMI and IOSCO recognise that models and approaches to margining may vary across CCPs. In order to help participants understand how they might be affected by margin calls, and/or where the items listed are not specifically relevant for a CCP, other key assumptions and parameters should be disclosed and the items listed should be used as a guide to the types of disclosures and level of details that is expected regarding initial margin assumptions and parameters.

Item 6.5: At a minimum, CCPs are expected to disclose the achieved margin coverage ratio for each clearing service and margin model and the value of any uncovered exposures.

Item 6.6: This disclosure is seeking information on the potential liquidity impact of changes in marked to-market values. It is not seeking to provide information on changes in the level of initial margin that may be related to changes in the volatility of prices. CCPs are expected to disclose the total of variation margin called from participants each day (including for options CCPs, where variation margin is called but not paid out).

Principle 7: Liquidity Risk

'Relevant currencies' refers to currencies in which the CCP is obliged to make pay-outs. If the CCP considers disclosures for 7.1 and 7.2 "as at quarter end" to be unrepresentative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Items 7.1 and 7.2: CCPs should refer to paragraphs 3.7.10 and 3.7.11 of the PFMI for a definition of 'qualifying liquid resources' and 'supplementary liquidity risk resources'. CCPs are not asked to disclose the names of providers of liquidity resources or investment counterparties. CCPs should not double count assets: for example, assets should not be listed as qualifying under 7.1(e) to the extent that they are required to offer to liquidity providers under 7.1(c). CCPs should add explanatory notes to describe how the CCP decides which payment obligations to prioritize if a schedule does not exist or if otherwise this would help to understand the CCP's procedures.

Item 7.3: This item requests high-level disclosure of the results of a CCP's stress-testing of its liquid resources, both in aggregate and by currency.

Principle 12: Exchange-of-value settlement systems

Items 12.1 and 12.2: The requested percentages refer only to exchange-of-value settlements to which the CCP is a counterparty, and not, for example, to settlement of variation margin payment obligations, or collection and return of initial margin. Gross and net settlement models may qualify as DvP, PvP or DvD, providing that the final settlement of one leg of the exchange occurs if and only if the final settlement of the other leg also occurs.

Principle 13: Default rules and procedures

Item 13.1: CCPs should disclose quantitative information related to defaults as soon as is practicable, subject to constraints on disclosure such as ongoing legal cases.

Principle 14: Segregation and portability

Item 14.1: Disclosures under item 14.1 give quantitative data on the degree of segregation of client assets. Although some CCPs may be unable to disclose particular items (e.g. CCPs may not know the number of clients covered by omnibus accounts), CCPs should complete this item with as much information as is available. For clearing services where fewer than five clients have individually segregated accounts, the CCP should not disclose information on individually segregated accounts.

Principle 15: General business risk

A CCP that discloses these items in a publicly available annual report would meet this standard, but should also include the data in the quantitative disclosure report so that it is readily available in a single place. This information may be disclosed at the level of the legal entity for which published accounts are prepared, even if clearing services are only one part of the entity's activities. The CCP should note the legal entity or activity to which the disclosure relates. The disclosure may be made at the same time as the annual accounts are released.

Item 15.1: The PFMI states that a CCP should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. Under this item a CCP should disclose the amount of liquid net assets funded by equity which can absorb general business losses. This should, at a minimum, equal at least six months of current operating expenses in accordance with Principle 15. The CCP should not include in its disclosure for 15.1(a) such amount of its own capital as must be allocated or held for other purposes, such as "skin in the game" in the default waterfall, and is not therefore available to cover business risks.

Principle 16: Custody and investment risks

Items 16.1 to 16.3: These items request disclosures 'as at quarter end'. If a CCP does not consider the composition of its investment portfolio at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges. This disclosure looks at the reinvestment of cash received from participants, and not at how the CCP's own funds are held. If, however, participant cash is co-mingled with the CCP's own funds in the investment portfolio, the CCP should clarify how this is reflected in the data published to satisfy this disclosure, for example by specifying the proportion of the investment portfolio that is funded from the CCP's own funds.

Principle 17: Operational risk

Items 17.1, 17.2, 17.3 and 17.4: Core systems used in clearing are those that enable the acceptance and novation of trades, and enable the calculation of margin and settlement obligations. An incident that results in an interruption to the CCP's ability to perform its own functions in relation to trade acceptance and novation, or calculation of margin and settlement obligations is considered a loss of availability. An incident that compromises the CCP's ability to correctly perform the aforementioned functions is also considered a loss of availability, even if there is no actual outage. Successful failover to a back-up site without interruption to services would not count as a loss of availability. CCPs should make clear to which system or systems performance targets apply.

Principle 18: Access and participation

Item 18.1: It is assumed for the purposes of this disclosure that participants would be the legal entities with which the CCP has a counterparty relationship as a clearing member – CCPs should specify if they are using some other basis to define number of participants. Disclosures in this section would not therefore extend to clients. CCPs should report 'category of membership' as relevant to their business. Where relevant, CCPs should differentiate between clearing members that clear their own trades through a CCP and also offer access to the CCP to their clients (often referred to as 'general clearing members') and clearing members that only clear their own trades (often referred to as 'direct clearing members').

Item 18.2: Percentage of net open positions should be the percentage of gross notional for derivatives or the total cleared value for securities transactions or similar.

Items 18.2 to 18.4: For clearing services with fewer than ten members, this report does not make a disclosure recommendation.

Principle 19: Tiered participation arrangements

Item 19.1: For clearing services with fewer than ten members, this report does not make a disclosure recommendation.

Principle 20: FMI links

Items 20.1 to 20.5: These disclosures refer to arrangements in which trades clear over an interoperable link between CCPs, because clearing members are from different CCPs. CCPs should identify each link and cross-margining arrangement in their supporting comments so that quantitative disclosures can be tied to a specific link.

Items 20.2, 20.3, 20.5, 20.6 and 20.7(b): These items request disclosures 'as at quarter end'. If a CCP does not consider disclosures at quarter end to be representative, it is encouraged to provide explanatory notes outlining why this is the case, and to provide additional metrics such as quarterly averages, or maximums, minimums, and interquartile ranges.

Principle 23: Disclosure of rules, key procedures, and market data

Item 23.1 and 23.2: This item is intended to capture the daily *flow* of clearing activity, while item 23.2 is intended to capture the stock of novated trades that have not yet been settled.

Item 23.3: This information is to be disclosed to facilitate an understanding of which markets might be affected by a CCP being unable to clear. This information should only be provided where the relevant execution facility is content for the CCP to disclose.

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