Public Quantitative Disclosure Standards for Central Counterparties

**ASX Clear Pty Limited** 

June 2016



## Contents

INTRODUCTION	
Overview	3
BACKGROUND	
Purpose of the disclosures	
FREQUENCY AND TYPE OF DISCLOSURE	4
Principle 4 – Credit Risk	5
Principle 5 – Collateral	9
Principle 6 – Margin	
Initial Margin	
Margin Calls	
Principle 7 – Liquidity Risk	14
PRINCIPLE 12 – EXCHANGE OF VALUE SETTLEMENT SYSTEM	
PRINCIPLE 13 – DEFAULT RULES AND PROCEDURES	
PRINCIPLE 14 – SEGREGATION AND PORTABILITY	
Principle 15 – General Business Risk	
Principle 16 – Custody and Investment Risk	20
Principle 17 – Operational Risk	23
PRINCIPLE 18 – ACCESS AND PARTICIPATION REQUIREMENTS	25
PRINCIPLE 19 – TIERED PARTICIPATION ARRANGEMENTS	
Principle 20 – FMI Links	
Interoperability	
Cross Margining	
PRINCIPLE 23 – DISCLOSURE OF RULES, KEY PROCEDURES AND MARKET DATA	31
PRINCIPLE BY PRINCIPLE NOTES	
Principle 4: Credit risk	
PRINCIPLE 5: COLLATERAL	
Principle 6: Margin	
Principle 7: Liquidity Risk	35
PRINCIPLE 12: EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS	35
PRINCIPLE 13: DEFAULT RULES AND PROCEDURES	35
PRINCIPLE 14: SEGREGATION AND PORTABILITY	35
PRINCIPLE 15: GENERAL BUSINESS RISK	
PRINCIPLE 16: CUSTODY AND INVESTMENT RISKS	
PRINCIPLE 17: OPERATIONAL RISK	
PRINCIPLE 18: ACCESS AND PARTICIPATION	
PRINCIPLE 19: TIERED PARTICIPATION ARRANGEMENTS	
Principle 20: FMI links	
PRINCIPLE 23: DISCLOSURE OF RULES, KEY PROCEDURES, AND MARKET DATA	
DISCLAIMER	

## 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 CCP<sup>1</sup>;
- 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

<sup>&</sup>lt;sup>1</sup> All values are provided in Australian dollars unless otherwise indicated

## Principle 4 – Credit Risk

		Requir	ement	
4.1	contributions) ii. aggregate participant con iii. other (b) committed i. own/parent funds that a ii. aggregate participant con iii. aggregate participant con	excluding initial and retained t by: part of the default waterfall (function of the default waterfall (function) ntributions (both amount requing re committed to address a par mmitments to address an initia mmitments to replenish the de fter the initial participant defau	variation margin), split by clear irther split by whether used befo ired and post-haircut amount pos ticipant default (or round of parti al participant default (or initial rou fault fund to deal with a subseque ult (or round of participant defaul	ore, alongside, or after, member sted, where different) cipant defaults) und of participant defaults) ent participant default (or round
	[[	Disclo		
	ASX Clear has total default resource from ASX and the ability to call on a	es of up to \$550m. This is com	prised of a paid in default fund that	at has \$250m paid in resources
	In the event of a participant defaul additional Initial Margins that had I	· ·		cipant together with any
		ASX Clear Total Default Resc	ources	
	Up to \$300m	Recovery Assessn	nents	
	\$178.5m	Equity (provided by As	SX)	pplication
	\$71.5m	Restricted Capital R	eserve	Order of App
		Defaulter's Margins, Addition Commitment	al Margins and	
		Paid in re	sources	
		Promisso	ry resources	
	Update Frequency:	Quarterly	Last Updated:	30 June 2016

		Requir	ement	
4.2	KCCP Kccp need only be reported by t	hose CCPs which are, or seek to b	e, a "qualifying CCP" under releva	ant law.
	[Refer to the explanatory note a	t the end of this document for ad	ditional details]	
		Disclo	osure	
	<i>,</i> , , , , , , , , , , , , , , , , , , ,	ind contributions. A CCP's hypotl	ed for the purpose of determining hetical capital requirement is drive	
		ASX is required to calculate the o	P (the actual default resources and default resources on bank clearing	•
	The <b>Kccp</b> (Hypothetical capital) f \$250m.	or ASX Clear as at the reporting p	eriod was \$22,437 compared to a	ctual default resources held of
	Update Frequency:	Quarterly	Last Updated:	30 June 2016

	Requirement			
4.3	Value of pre-funded default resources (excluding initial and retained varia split by:	tion margin) held for ead	ch clearing service, in to	tal and
	<ul> <li>Cash deposited at a central bank of issue of the currency concerned</li> <li>Cash deposited at other central banks</li> <li>Secured cash deposited at commercial banks (including reverse repo)</li> <li>Unsecured cash deposited at commercial banks</li> <li>Non-cash</li> <li>sovereign government bonds         <ul> <li>domestic</li> <li>other</li> <li>agency bonds</li> <li>state/municipal bonds</li> <li>corporate bonds</li> <li>gold</li> <li>other (please describe)</li> <li>mutual funds / UCITs</li> <li>other (please provide explanation of type of asset)</li> </ul> </li> </ul>			
	Disclosure			
	Pre-funded default resources of \$250m (repayable upon demand) are prov margins from ASX Clear and ASX Clear (Futures), default fund contributions CCPs own funds are combined into one portfolio and invested into various As the default resources cannot be individually assigned to specific asset cl proportion of the default resources to the total portfolio and this % has be	lodged by participants o assets through a Trust. asses, a general allocation	f ASX Clear (Futures) an	d the
	Investment	Pre Haircut (m)	Post Haircut (m)	
	Cash			
	Cash deposit at central bank of issue of currency	0.4	0.4	
	Secured cash deposit at commercial banks (including reverse repo)	42.7	42.7	

Unsecured cash deposit at commercial banks		66.4	66.4
Investment		Pre Haircut (m)	Post Haircut (m)
Non- Cash			
State / municipal bonds		4.0	4.0
Corporate Bonds		2.0	2.0
Other – Floating Rate Notes		40.4	40.4
Other – Negotiable Certificates of Deposit		44.8	44.8
Other – Promissory Notes issued by State Governments		44.8	44.8
Other – Treasury Notes		4.5	4.5
	Total	250.0	250.0

**Note:** As haircuts are only charged on the equity and debt security non-cash collateral lodged by participants to cover their margin positions, both the pre-haircut and post-haircut values of the pre-funded default resources above will be the same.

Update Frequency:

Quarterly Last Updated: 30 June 2016

		Requirement	
4.4	1) State wh resource	nether the CCP is subject to a minimum "Cover 1" or "Cover 2" requirement in relation to total pre-funded defau es.	ılt
		clearing service, state the number of business days within which the CCP assumes it will close out the default whe ng credit exposures that would potentially need to be covered by the default fund.	'n
	the defa	clearing service, what is the <b>estimated</b> largest aggregate stress loss (in excess of initial margin) that would be caused but of any <b>single</b> participant and its affiliates (including transactions cleared for indirect participants) in extreme be market conditions?	-
		he number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in exce margin) and by how much.	SS
		n clearing service, what was the <b>actual</b> largest aggregate credit exposure (in excess of initial margin) to any <b>sing</b> ant and its affiliates (including transactions cleared for indirect participants)?	le
	the defa	clearing service, what is the <b>estimated</b> largest aggregate stress loss (in excess of initial margin) that would be caused b ult of any <b>two</b> participants and their affiliates (including transactions cleared for indirect participants) in extreme be market conditions?	-
		he number of business days, if any, on which the above amount exceeded actual pre-funded default resources (in exce margin) and by how much.	SS
		n clearing service, what was the <i>actual</i> largest aggregate credit exposure (in excess of initial margin) to any <i>tw</i> Ints and their affiliates (including transactions cleared for indirect participants)?	0
	[Refer to th	ne 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)	Peak day amount in the previous 12 months (Cover 1) \$193.4m	

		Mean average ove	r the previous 12 months (Cover 1)		\$80.3m
4	4)	The peak amount i \$250.0m	n the previous 12 months of \$193.4m	did not exceed the pre-funde	ed default resources of
_	5)	Peak day amount i	n the previous 12 months (Cover 1)		\$32.7m
5	5)	Mean average ove	r the previous 12 months (Cover 1)		\$0.3m
0	c)	Peak day amount i	n the previous 12 months (Cover 2)		\$289.9m
C	6)	Mean average ove	r the previous 12 months (Cover 2)		\$125.5m
7	/)		n the previous 12 months of \$289.9m on a linitial margin was called from the r	•	
	0)	Peak day amount i	n the previous 12 months (Cover 2)		\$34.9m
2	8)	Mean average ove	r the previous 12 months (Cover 2)		\$5.5m
	U	odate Frequency:	Quarterly	Last Updated:	30 June 2016

# Principle 5 – Collateral

			l	Requirement	
5.1	Assets eligible as	initial margin, and the respective	haircut	s applied	
	[Refer to the expl	anatory note at the end of this d	ocumen	t for additional details]	
				Disclosure	
	Subject to approvoit of margin:	al and on such conditions as ASX	Clear ma	ay determine from time to time, the follo	owing may be provided in respect
	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
	Cash	SPDR S&P / ASX 200 ETF		14%	
	Equities	Bank Guarantees (only in exceptional circumstances and with the prior approval of ASX Clear)		N/A	Initial Margin
		e link below for a list of acceptab om.au/regulation/regulatory-col		Equity securities and their relevant hair e/asx-clear.htm	cuts.
	Updat	e Frequency: When chan	ges mad	e Last Updated:	30 June 2016

		Requir	rement	
5.2	Assets eligible for pre-funded p from 5.1)	articipant contributions to the do	efault resources, and the respecti	ve haircuts applied (if different
		Discl	osure	
	The ASX Clear default resources	do not contain any pre-funded pa	articipant contributions.	
	Update Frequency:	When changes made	Last Updated:	30 June 2016

			Req	luirements	
5.3	1. c 2. a 3. l 4. T	assumed holding/liqui ook-back period used The number of days du exceeded the haircut o	geted through the calculatio dation period for the assets a for testing the haircuts, uring the look-back period on	accepted, which the fall in value during the assu	umed holding/liquidation period
			D	isclosure	
	Back testin	g of Collateral haircut	s is performed on a quarterly	v basis covering the previous 12 month	15.
	Ref	ltem		Result	
	1	Confidence Interva	al Targeted	99%	
	2	Assumed Holding	<sup>/</sup> Liquidation Period	3 days business days	
	3	Look-back Period		263 days business days	
	4	Number of days ex	ceeded the Haircut	27*	
	*Note –	The 27 breaches were ov	er 59,701 observations giving a	coverage of 99.99%	
		Update Frequency:	Quarterly	Last Updated:	30 June 2016

# Principle 6 – Margin

## Initial Margin

		Requ	irement	
6.1	For each clearing service, total initial n	nargin <b>required</b> , split by h	ouse and client (or combined total	if not segregated)
	For each clearing service, state wheth participant's own position (gross), or f	0 1		•
	[Refer to the explanatory note at the e	end of this document for a	additional details]	
		Disc	losure	
	ASX Clear faces each clearing participa each client has their own individual Cli		e) for all Cash Equities transactions.	For Exchange Traded Options
	Туре	(m)		
	Cash Equities - House (Gross)	\$154.9		
	ETO - House (Gross)	\$297.0		
	ETO – Client (Gross)	\$808.8		
	Update Frequency:	Quarterly	Last Updated:	30 June 2016

<ul> <li>For each clearing service, total initial margin <i>held</i>, split by house and client (if segregated).</li> <li>For each of the overall house and client totals (or for just the overall total posted, if house and client are not segregated), the imounts of:</li> <li>Cash deposited at a central bank of issue of the currency concerned</li> <li>Cash deposited at other central banks</li> <li>Secured cash deposited at commercial banks (including reverse repo)</li> <li>Unsecured cash deposited at commercial banks</li> <li>Non-cash</li> <li>sovereign government bonds</li> <li>o other</li> <li>agency bonds</li> </ul>
<ul> <li>Cash deposited at a central bank of issue of the currency concerned</li> <li>Cash deposited at other central banks</li> <li>Secured cash deposited at commercial banks (including reverse repo)</li> <li>Unsecured cash deposited at commercial banks</li> <li>Non-cash</li> <li>sovereign government bonds <ul> <li>domestic</li> <li>other</li> </ul> </li> </ul>
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 • domestic • other
<ul> <li>state/municipal bonds</li> <li>corporate bonds</li> <li>equities</li> <li>commodities         <ul> <li>gold</li> <li>other</li> <li>mutual funds / UCITs</li> <li>other (please provide explanation of type of asset)</li> </ul> </li> <li>Amounts should be reported both pre-haircut (i.e. at market value) and at post-haircut value.</li> </ul>
Refer to the explanatory note at the end of this document for additional details]
Disclosure
Disclosure Cash margins and default fund contributions lodged by participants of ASX Clear and ASX Clear (Futures) and the CCPs own funds

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 non-cash collateral (including any excess collateral) that has been lodged by any of the clearing participants.

		Но	ouse	Cl	ient
Investments	Pre	Haircut (m)	Post Haircut (m)	Pre Haircut (m)	Post Haircut (r
Cash					
Cash deposit at central bank of issue of currency		0.1	0.1	0.1	(
Secured cash deposit at commercial banks (including reverse repo)		79.3	79.3	53.5	5
Unsecured cash deposit at commercial banks		123.4	123.4	83.2	8
Non-Cash					
State / municipal bonds		7.6	7.6	5.1	
Corporate Bonds		3.8	3.8	2.5	
Equities		18.8	13.2	722.8	50
Other – Floating Rate Notes		75.1	75.1	50.6	5
Other – Negotiable Certificates of Deposit		83.2	83.2	56.1	5
Other – Promissory Notes issued by State Governmen	nts	83.2	83.2	56.1	5
Other – Treasury Notes		8.5	8.5	5.7	
Other - Bank Guarantees		0	0	12.2	1
	tal	483.0	477.4	1,047.9	83

	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 June 2016		

	Requirement
6.4	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:
	<ul> <li>(i) single-tailed confidence level targeted;</li> <li>(ii) sample/data look-back period for calibrating the model;</li> <li>(iii) adjustments or scalars or weighting, if any, applied to historical data (e.g. to reflect changes in volatility);</li> <li>(iv) close-out/holding periods by product (or, if varying, contract type);</li> <li>(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];</li> <li>(vi) the frequency of parameter reviews.</li> <li>[Refer to the explanatory note at the end of this document for additional details]</li> </ul>

		Disclosure	
Ref	Item	SPAN (Derivatives)	HSVaR (Equities)
(i)	Single-tailed confidence level targeted	99.7%	99.7%
(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 look- back 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 ar then a portfolio add on factor of 30% is added to construct a reliable estimate of the desired 99.7% margin coverage.
			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	1 and 2 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 day Flat Rate Warrants = 3 days Flat Rate Non-All Ordinaries = 3 days
(v)	Offsets between different contracts	http://www.asx.com.au/regulation/reg ulatory-compliance/asx-clear.htm	N/A
(vi)	Frequency of reviews	Monthly	Quarterly

-		
Rea	uirem	nent
ncy	unch	IC III

6.5 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 markedto-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 Equities			
(a)	2,187	21			
(b)	2,204,420	8,318			
(c)	99.9%	99.7%			
Peak	\$2.8m	\$5.7m			

	Average		\$0.0m		\$0.9m		
	Update Fre	equency:	Quar	terly		Last Updated:	30 June 2016

## **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. \$50.9m				
	Update Frequency:	Quarterly	Last Updated:	30 June 2016	

	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. \$287.7m					
	Update Frequency:	Quarterly	Last Updated:	30 June 2016		

	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. \$125.5m					
	Update Frequency:	Quarterly	Last Updated:	30 June 2016		

## Principle 7 – Liquidity Risk

		Require	ment			
S	tate whether the clearing serv	ice maintains sufficient liquid resou	rces to 'Cover 1' or '	'Cover 2'.		
S (i (i (i (i (i) (i)	ervice level) – for each relevan a) Cash deposited at a centra b) Cash deposited at other c c) Secured cash deposited at d) Unsecured cash deposited e) secured committed lines committed foreign exchar f) unsecured committed lines g) highly marketable collate	al bank of issue of the currency conc entral banks t commercial banks (including rever	cerned se repo) ateral/security will draw without provio ents that are readil	be provided ding collatera ly available a	by the CCP if drawn) includir Il/security); and convertible into cash wi	
s	tate whether the CCP has rout	ine access to central bank liquidity c	or facilities.			
<ul> <li>If, in using qualifying liquid resources the CCP is required or allowed to give priority to meeting certain payment obligations, ple provide or reference:</li> <li>the schedule of payments or priority for allocating payments, if such exists;</li> </ul>				ain payment obligations, plea		
•	any applicable rule, policy,					
Disclosure						
ir	nto various assets through a Tr	clearing houses together with the CC rust, a general allocation has been m	CPs own funds are c nade based on the p	proportion of		
ir c	nto various assets through a Tr learing house to the total port \SX Clear maintains sufficient li	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to	CPs own funds are c nade based on the p	proportion of	the portfolio lodged by each	
ir c	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2.	CPs own funds are c nade based on the p	proportion of	the portfolio lodged by each Value (m)	
ir c	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2.	CPs own funds are c nade based on the p the relevant asset o	proportion of	the portfolio lodged by each Value (m) 0.2	
ir C	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency commercial banks (including reverse	CPs own funds are c nade based on the p the relevant asset o	proportion of	the portfolio lodged by each Value (m) 0.2 175.4	
ir c	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co Unsecured cash deposited at	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency ommercial banks (including reverse t commercial banks	CPs own funds are c nade based on the p the relevant asset o repo)	proportion of	the portfolio lodged by each Value (m) 0.2 175.4 122.2	
ir c	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co Unsecured cash deposited at	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency ommercial banks (including reverse t commercial banks held in custody & investments that	CPs own funds are c nade based on the p the relevant asset o repo)	proportion of	the portfolio lodged by each Value (m) 0.2 175.4	
ir c	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co Unsecured cash deposited at Highly marketable collateral	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency ommercial banks (including reverse t commercial banks held in custody & investments that	CPs own funds are c nade based on the p the relevant asset o repo)	proportion of	the portfolio lodged by each Value (m) 0.2 175.4 122.2	
	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co Unsecured cash deposited at co Unsecured cash deposited at co Highly marketable collateral available and convertible int Any cash reinvestments are onl obligations ASX Clear has a committed stan 5100m from ASX Limited backe	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency ommercial banks (including reverse t commercial banks held in custody & investments that to cash y in RBA eligible securities and ASX ( hdby (undrawn) liquidity facility of \$2 d by a commercial bank line.	CPs own funds are c hade based on the p the relevant asset of repo) are readily Clear is not required 150m. This compris	oroportion of class. d to give prior es of \$50m fr	the portfolio lodged by each Value (m) 0.2 175.4 122.2 578.4 876.2 rity in meeting payment rom ASX Limited and a furthe	
ir c A A S F A	nto various assets through a Tr learing house to the total port ASX Clear maintains sufficient li Investments Cash deposited at central ba Secured cash deposited at co Unsecured cash deposited at co Unsecured cash deposited at co Highly marketable collateral available and convertible int Any cash reinvestments are onl obligations ASX Clear has a committed stan 5100m from ASX Limited backe For Cash Equities, in the event of Arrangement (OTA) for any out	clearing houses together with the CC rust, a general allocation has been m folio and this % has been applied to iquid resources for Cover 2. Ink of issue of the currency commercial banks (including reverse t commercial banks held in custody & investments that to cash y in RBA eligible securities and ASX ( hdby (undrawn) liquidity facility of \$2	CPs own funds are c hade based on the p the relevant asset of repo) are readily Clear is not required 150m. This compris	d to give prior es of \$50m fr to enter into aring Participa	the portfolio lodged by each Value (m) 0.2 175.4 122.2 578.4 876.2 rity in meeting payment rom ASX Limited and a furthe an Offsetting Transaction ant. It is expected that availab	

	Requirement					
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 a	t the end of this document for ad	ditional details]			
	Disclosure					
	There are no supplementary liquidity risk resources beyond what has been detailed in principle 7.1 for ASX Clear.					
	Update Frequency:	Quarterly	Last Updated:	30 June 2016		

			Requirement	
Fo	or each cleai	ring service (or at the aggregate CCP le	vel if not managed at clearing service level):	
<ol> <li>What is the <i>estimated</i> 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?</li> <li>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.</li> <li>What is the <i>actual</i> largest intraday and multiday payment obligation of a single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months?</li> <li>What is the <i>estimated</i> largest same-day and, where relevant, intraday and multiday payment obligation <i>in each relevant currency</i> that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extremes by the default of any single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months?</li> <li>What is the <i>estimated</i> largest same-day and, where relevant, intraday and multiday payment obligation <i>in each relevant currency</i> 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?</li> <li>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.</li> </ol>				
[Re	efer to the e	explanatory note at the end of this doc	ument for additional details]	
			Disclosure	
	Ref	Result		
	Ref 1)	Result \$891.1m		
		\$891.1m 0 days*		
	1)	\$891.1m		
	1) 2)	\$891.1m 0 days* \$0.0m*		
	1) 2) 3)	\$891.1m 0 days* \$0.0m* Peak \$204.9m Cover 1: \$891.1m		
	1) 2) 3) 4) 5) Would be co	\$891.1m 0 days* \$0.0m* Peak \$204.9m Cover 1: \$891.1m Cover 2: \$1,337.5m Cover 1: 0 days* Cover 1: \$0.0m* Cover 2: 0 days* Cover 2: \$0.0m*	he use of the Offsetting Transaction Arrangements (refer 7.1)	

## Principle 12 – Exchange of Value Settlement System

		Requirement					
12.1	Percentage of	settlements by valu	e effected using a DvP, DvD or	PvP settlement mechanism			
	[Refer to the e	explanatory note at	the end of this document for ad	lditional details]			
			Discl	osure			
	Only Cash Equities transactions are settled through a Delivery vs. Payment (DvP) settlement mechanism as Exchange Traded Options are settled via the margining process.						
	trades) transa netted <sup>3</sup> per se	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 <sup>2</sup> . Then on the evening of Trade Date +1 (T+1) the novated transactions are netted <sup>3</sup> per security for settlement on T+2. The balance of transactions include the movement of stock between clearing participants and their clients to facilitate the					
		the DvP transaction					
	Туре	Percentage					
	DvP	100%					
	DvD	N/A					
	PvP N/A						
	Up	odate Frequency:	Quarterly	Last Updated:	30 June 2016		

		Requirement						
12.2	Percentage of	Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanism						
	[Refer to the e	explanatory note at t	the end of this document for ac	dditional details]				
			Discl	osure				
	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 ASX 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+2.							
	Туре	Percentage						
	DvP	100%						
	DvD	N/A						
	PvP N/A							
	Up	date Frequency:	Quarterly	Last Updated:	30 June 2016			

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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:						
	<ul> <li>Amount of loss versus amount of initial margin</li> <li>Amount of other financial resources used to cover losses</li> <li>Proportion of client positions closed-out/ported</li> </ul> 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 reporting period.						
	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 June 2016			

## Principle 14 – Segregation and Portability

		Requirement					
14.1	Split, by clearin	plit, by clearing service, of total client positions held in:					
	<ul><li>(b) omnibus</li><li>(c) legally se</li></ul>	<ul> <li>(b) omnibus client-only accounts, other than LSOC accounts (see below);</li> <li>(c) legally segregated but operationally comingled (LSOC) accounts;</li> </ul>					
	as a share of no	otional values cle	ared or of the settlement value of	securities transactions.			
	[Refer to the ex	planatory note a	at the end of this document for ad	ditional details]			
			Disclo	osure			
	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)					
		xchange Traded comments abov	Options only e regarding Cash Equities				
	Upo	late Frequency:	Quarterly	Last Updated:	30 June 2016		

## Principle 15 – General Business Risk

	Requirement					
15.1	<ul> <li>(a) Value of liquid net assets funded by equity</li> <li>(b) Six months of current operating expenses</li> </ul>					
	[Refer to the explanatory note at	the end of this document for ad	ditional details]			
		Discl	osure			
	<ul> <li>(a) Capital to cover General Bus assigned for ASX Clear busin</li> <li>(b) \$85.5m *</li> </ul>	-	company level and not the indivic	ual clearing house. \$35m is		
	*Disclosures are based on amour (Futures), for the financial year e		liaries (the group), which includes	ASX Clear and ASX Clear		
	Update Frequency:	Annual	Last Updated:	30 June 2016		
		Requir	ement			
15.2	Financial disclosures: including, b	ut not limited to,				
	total revenue,					
	<ul> <li>total expenditure,</li> <li>profits,</li> </ul>					
	<ul> <li>total assets,</li> </ul>					
	total liabilities.					
	Explain if collateral posted by cle	aring participants is held on or o	ff the CCP's balance sheet.			
		Discl	osure			
	ASX Clear has entered into an arrangement with a related entity for the provision of operational services and assets in exfor the assignment of clearing fees. Accordingly ASX Clear does not have any meaningful revenues or expenses within the itself.					
	The disclosures below are based	on amounts for ASX Limited and	its subsidiaries (the group), which	includes ASX Clear and ASX		
	Clear (Futures), for the financial y	vear ended 30 June 2016.				
	Total Revenue Total Expenditure	\$908.3m \$302.2m				
	Net Profits before Tax	\$606.1m				
	Net Profits after Tax	\$426.2m				
	Total Assets	\$10,451.6m				
	Total Liabilities	\$6,627.5m				
	Collateral posted by participants	to cover ASX Clear margin obliga	tions are held off the balance shee	et.		
	Update Frequency:	Annual	Last Updated:	30 June 2016		

	Requirement
15.3	<ul> <li>Income breakdowns:</li> <li>(a) percentage of total income that comes from fees related to provision of clearing services;</li> <li>(b) percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants.</li> </ul>
	Disclosure
	(a) % of total income from fees related to provision of clearing services: 21% (1)

 (b) % of total income from the reinvestment of cash margins: 12% (2)

 (1) Clearing fees for derivatives are bundled with trading and settlement fees. A portion of the total fees charged for trading, clearing and settlement has been allocated to clearing activities based on estimates by management.

 (2) The % of total income from reinvestment of cash margins disclosures are based on amounts for ASX Limited and its subsidiaries (the group), which includes ASX Clear and ASX Clear (Futures), for the financial year ended 30 June 2016. Re-hypothecation of collateral is not permitted.

 Update Frequency:
 Annual
 Last Updated:
 30 June 2016

## 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 of whether it was received as initial margin or default fund contribution						
	Disclosure					
	\$792.1m 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 June 2016					

	Requirement
16.2	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:
	<ul> <li>percentage of this total participant cash held as cash deposits (including through reverse repo); further split into:         <ul> <li>percentage held:</li> <li>as cash deposits at central banks of issue of the currency deposited;</li> <li>as cash deposits at other central banks;</li> <li>as cash deposits at commercial banks; of which:                 <ul> <li>percentage secured (including through reverse repo);</li> <li>percentage unsecured;</li> <li>in money market funds;</li> <li>in other forms (please specify).</li> </ul> </li> <li>percentage split by currency of these cash deposits (including reverse repo) and money market funds - local currency, USD, EUR, other</li> </ul> </li> </ul>
	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: • domestic; • other; • agency bonds; • state/municipal bonds; • 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.

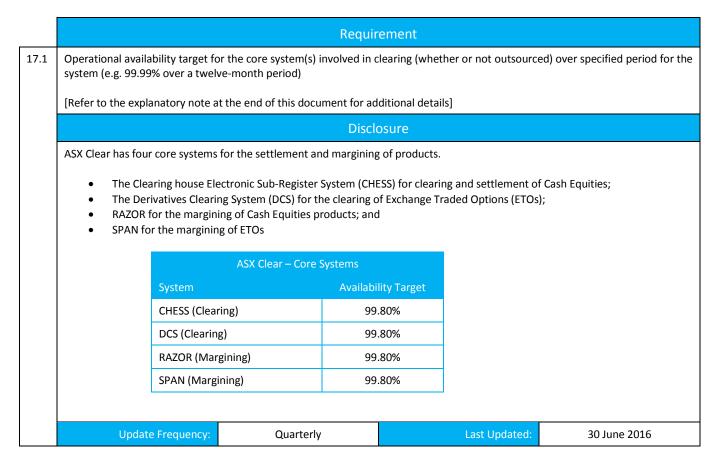
As the total cash received from Participants cannot be individually assigned to specific asset classes, a general allocation has been made based on the proportion of the cash received from Participants to the total portfolio and this % has been applied to each asset class.

The below disclosures include excess cash received from participants over and above their initial margin requirement.

Investment					
Central bank of issue of the cu	rrency deposited			0.02%	
Secured cash deposits at comn	nercial banks (including reverse	repo)		17.08%	
Unsecured cash deposits at co	mmercial banks			26.59%	
	% of total participant ca	ash held as cash deposits (incl. re	verse repo):	43.69%	
State / municipal bonds					
Other - Corporate Bonds				0.81%	
Other – Floating Rate Notes				16.17%	
Other – Negotiable Certificates	s of Deposit			17.94%	
Other – Promissory Notes issue	ed by State Governments			17.93%	
Other – Treasury Notes					
% of total participant cash invested in securities:					
Weighted average maturity of	these securities (WAM)			59.97 days	
Estimated risk on the Investme	ent portfolio (VaR = 2 day holdin	g period calculated at 99% confide	ence)	\$272K	
Counterparty		Limit (\$) per Co			
Australian Government		Unlimit			
State Government		\$1,400			
New Zealand Government		NZD\$25			
New Zealand Deposit-taking Institution NZD\$100m					
Major Australian Deposit-takin	-	\$5751			
Other Australian Deposit-taking Institution (A1+) \$300m					
Other Australian Deposit-taking Institution (A1) \$200m					
*Note – Revised limits effective	e COB 30 June 2016				
Update Frequency:	Quarterly	Last Updated:	30 J	une 2016	

	Requirement					
16.3	Rehypothecation of participant	assets (i.e. non-cash) by the CCP v	where allowed, split by initial mar	gin and default fund:		
	<ul> <li>total value of participant non-cash rehypothecated;</li> <li>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);</li> </ul>					
		Disclo	osure			
	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 June 2016		

## Principle 17 – Operational Risk



	Requirement						
17.2	Actual availability o	Actual availability of the core system(s) over the previous twelve month period.					
				Disclosure			
	All ASX Clear core s	systems have I	nad 100% availability	over the last 12 months			
			ASX Clear – Core S	Systems			
		System		Availability			
		CHESS (Clear	ing)	100.00%			
		DCS (Clearing	g)	100.00%			
		RAZOR (Mar	gining)	100.00%			
		SPAN (Margi	ning)	100.00%			
	Update	Frequency:	Quarterly		Last Updated:	30 June 2016	

	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 were no failures with the ASX Clear core systems for the last 12 months

System	Number of Failures	Duration (Mins)
CHESS (Clearing)	0	0
DCS (Clearing)	0	0
RAZOR (Margining)	0	0
SPAN (Margining)	0	0

			Requirement		
L7.4	Recovery time objective(	s) (e.g. within two hours)			
		Disclosure			
	All ASX Clear core systems are subject to a 2 hour recovery time objective.				
		ASX Clear – Co	ore Systems		
	Syste	m	Recovery Time Objective		
	CHES	S (Clearing)	2 Hours		
	DCS (	Clearing)	2 Hours		
	RAZO	R (Margining)	2 Hours		
	SPAN (Margining) 2 Hours				
	Update Frequ	ency: Quart	erly	Last Updated:	30 June 2016

## Principle 18 – Access and Participation requirements

	Requirements						
18.1	Number of clearing members, by clearing service, split by:						
	<ul> <li>category of membership (e.g. direct clearing member, general clearing member);</li> <li>type of participant (central bank, CCP, bank, other); and</li> <li>domestic or foreign participants.</li> </ul>						
	[Refer to the explanatory note at the end of this document for additional details]						
	Disclosure						
	On ASX Clear there are two categorie	es of Clearing Participants, "Dire	ect: and "General":				
	<b>"Direct Participant"</b> 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 Membersh	ip Type of Participant	Domestic	Foreign			
	Direct	Bank	0	0			
	Direct	Bank Subsidiary	5	0			
	Direct	Investment Bank	7	0			
	Direct	Domestic	11	0			
	Direct	International	1	0			
	Direct	Suspended	1	0			
		Total Direct Participants	25	0			
					L		
	General	Bank	1	1			
	General	Bank Subsidiary	5	0			
	General	Investment Bank	2	0			
	General	Domestic	2	0			
	General	International	1	0			
	General	Suspended	0	0			
		Total General Participants	11	1			
		Grand Total	36	1			
	Update Frequency:	Quarterly	Last Updat	ed: 30 June 20	016		

	Requirement					
18.2	For each clearing service with ten or more	members, but fewer t	han 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 b	y the largest five and te	en clearing members, in	cluding 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 upda largest five and ten clearing participants w		earing Participants. Pero	centage of o	pen positions held by the	
		Largest 5 Cle	aring Participants	Largest	: 10 Clearing Participants	
	Cash Equities - Average	4	1.26%	69.76%		
	Cash Equities - Peak end of day	4	7.09%		76.86%	
	ETO – Average	65.87% 85.14%			85.14%	
	ETO – Peak end of day	67.83% 85.82%			85.82%	
	Update Frequency:	Quarterly	Last	Updated:	30 June 2016	

	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 addition	nal details]		
		Disclosur	e		
	As detailed in 18.1 at the time of the upd largest five and ten clearing participants of the second	-	Participants. Percentag	e of initial margin held by the	
		Largest 5 Clearing	Participants L	argest 10 Clearing Participants	
	Cash Equities - Average	39.19%	,	63.57%	
	Cash Equities - Peak end of day	54.52%	,	72.54%	
	ETO – Average	57.98% 83.28%			
	ETO – Peak end of day	60.39% 84.99%			
	Update Frequency:	Quarterly	Last Updat	ed: 30 June 2016	

	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
	<ul> <li>For each segregated default fund with 25 or more members:</li> <li>Percentage of participant contributions to the default fund contributed by largest five and ten clearing members in aggregate</li> </ul>

[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 June 2016	

## Principle 19 – Tiered Participation arrangements

				Requi	rement		
1	.9.1	Measures of concentration of client clearing:					
		1. Numbe	1. Number of clients (if known)				
		2. Numbe	er of direct members th	nat clear for clients			
		<ul> <li>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)</li> <li>[Refer to the explanatory note at the end of this document for additional details]</li> </ul>					
				Discl	osure		
		Ref	Result				
		1. 42 ASX Market Participants, and 2 CHI-X Trading Participants that clear through a direct member					
	2. 10 Direct members clear for the above						
		3.	Top 5 = 47% Top 10 = 52%				
		ι	Jpdate Frequency:	Quarterly	L	ast Updated:	30 June 2016

# Principle 20 – FMI Links

## Interoperability

	Requirement					
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 at the end of this document for additional details]					
	Disclosure					
	ASX Clear has the following FMI Links:					
	<ul> <li>ASX Settlement Pty Limited; and</li> <li>Austraclear Limited</li> </ul>					
	ASX Clear does not transact through either of these FMI Links.					
	Update Frequency:	Quarterly	Last Updated:	30 June 2016		

	Requirement							
20.2	Initial margin or equivalent financial resources <i>provided to</i> each linked CCP by the CCP to cover the potential future exposure of the linked CCP on contracts cleared across link							
	Disclosure							
	Not Applicable							
	Update Frequency:	Quarterly	Last Updated:	30 June 2016				

	Requirement						
20.3	Initial margin or equivalent financial resources <i>collected from</i> each linked CCP to cover potential future exposure to the linked CCP on contracts cleared across link (at market value and post-haircut)						
	Disclosure						
	Not Applicable						
	Update Frequency:	Quarterly	Last Updated:	30 June 2016			

			Requir	ement	
20.4		Its of back-testing of cover mum this should include:	rage of initial margin or equivale	nt financial resources on trades	cleared through each link. At a
	(a)		•	age provided by margin and equ arket exposure to that linked CC	
	(b) (c)			l by number of days covered in the ed intraday/continuously or only o	,
			Disclo	osure	
	Not	Applicable			
		Update Frequency:	Quarterly	Last Updated:	30 June 2016

Requirement			
CCP, that are available to the lin	ked CCP to cover exposures to		-
	Discl	osure	
Not Applicable			
Update Frequency:	Quarterly	Last Updated:	30 June 2016
	CCP, that are available to the lin standard default fund (please spe Not Applicable	Additional pre-funded financial resources (if any) beyond initial r CCP, that are available to the linked CCP to cover exposures to standard default fund (please specify) Discl Not Applicable	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial res CCP, that are available to the linked CCP to cover exposures to the CCP and whether part of, addi standard default fund (please specify) Disclosure Not Applicable

# Requirement 20.6 Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources collected from each linked CCP, that are available to the CCP to cover exposures to the linked 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 June 2016

### **Cross Margining**

		Requir	ement	
20.7			as a percentage of total trade valu cross margining, as a percentage c	
		Discl	osure	
	Not Applicable			
	Update Frequency:	Quarterly	Last Updated:	30 June 2016

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

				Require	eme	ent			
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								
	The metrics below for Exchange Traded Options are based on trades, however for all other instruments the metrics below are based on the novated settlement instructions with a settlement date due in the reporting quarter.								
		Exchange Traded Instrument		Volume (k)		Value (m)			
	Equities			906.1		3,970.5			
		Structured Products		1.2		7.7			
	Interest Rate Hybrid Exchange Traded Funds Australian Government Bonds Company Options			0.5		7.9			
				2.2		56.6			
				0.0		0.7			
				0.4		1.2			
		Exchange Traded Options		5.0		89.6			
		Non - Exchange Traded Instrument		Volume		Value (m)			
		Equity OTC		0.0		0.0			
		Update Frequency:	Qu	arterly		Last Updated	: 30 June 2016		

### 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

The metrics below are based on the novated settlement instructions with a settlement date during the quarter.

9,249.2		
19.9		
14.2		
191.6		
2.3		
2.3		
	19.9 14.2 191.6 2.3	9,249.2 19.9 14.2 191.6 2.3

Average daily volume	a and notional contract val	Requirement							
	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 Exchange Traded Options the metrics are based on number of trades.									
ASX Trade	910.3	4,044.5	5.0	89.6					
		511.7	Not Applicable	Not Applicable					
	For Cash Equities the and 30-Jun-16. For Exchange Traded Execution Facility	For Cash Equities the metrics below are based o and 30-Jun-16. For Exchange Traded Options the metrics are ba <u>Execution Facility</u> <u>Cash Equities</u> <u>Average Daily Volume (k)</u>	Disclosure         For Cash Equities the metrics below are based on the novated settlement and 30-Jun-16.         For Exchange Traded Options the metrics are based on number of trades.         Execution Facility       Cash Equities Average Daily Volume (k)	Disclosure         Disclosure         For Cash Equities the metrics below are based on the novated settlement instructions with a settlement and 30-Jun-16.         For Exchange Traded Options the metrics are based on number of trades.         Execution Facility         Cash Equities Average Daily Volume (k)         Cash Equities Average Daily Value (m)					

## **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 provide dby 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.

## Disclaimer

This document provides general information only and may be subject to change at any time without notice. ASX Limited (ABN 98 008 624 691) and its related bodies corporate ('ASX') makes no representation or warranty with respect to the accuracy, reliability or completeness of this information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way, including by way of negligence, from or in connection with any information provided or omitted, or from anyone acting or refraining to act in reliance on this information.