

ECC CPMI-IOSCO Disclosure IV/2017

Date: 15.01.2018

Version: 1.0

Contact

European Commodity Clearing AG

Risk Controlling & Compliance

Phone: +49 341 24680-530 E-mail: riskcontrolling@ecc.de



	Index	disclosure item	date, type, value
4.	4000	Credit Risk (Principle 4)	
		Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing	As at quarter end Mn. EURO
4.1		service	(Bonds at collateral value)
	4101	a) pre-funded own capital that forms part of the default waterfall (used before	262,1
	4103	,	10,0
	4102		252,1
	4104	iii. other b) committed	0,0
	4104	l '	n/a
		default	n/a
	4106	ii. aggregate participant commitments to address an initial participant default	n/a
	4107		11/ 6
		deal with a subsequent participant default. [1]	173,0
		iv. other	n/a
4.2	4201	КССР	0,3
		Value of pre-funded default resources (excluding initial and retained	As at guarter and
4.3		variation margin)	As at quarter end Mn. EURO
4.5	4301	a) total Cash	202,4
	4302	l	[2]
	4303	ii. Cash deposited at other central banks	[2]
	4304	` " " ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	[2]
	4305	iv. Unsecured cash deposited at commercial banksb) Bonds at market value w/o haircut	[2]
	4306	,	4,1
	4307		9,8
	4308		10,5
	4309 4310		16,1
	4311	l	12,0
	4312	l	0,0
		c) Bonds at collateral value (post haircut)	
	4313	,	3,9
	4314		9,5
	4315		9,6
	4316 4317		15,5 0,0
	4317	l	11,1
	4319	1	0,0
		d) other	[3]
4.4		a) State whether the CCP is subject to a minimum "Cover 1" or "Cover 2"	As at quarter end
	4401	· ·	Cover 2
	4402	b) assumed close out period (days) c) the estimated largest aggregate stress loss (in excess of initial margin)	2
		that would be caused by the default of any single participant and its	
		affiliates (including transactions cleared for indirect participants) in	previous 12 months
		extreme but plausible market conditions?	Mn. EURO
	4403	,	259,9
	4404 4405	l	124,6
	4405	l	n/a
	4407		n/a

CPMI-I	OSCO Disclosure for Central Counterparties IV/2017	> ecc
	amount of exess of stress loss over DFW, day 3	n/a
	amount of exess of stress loss over DFW, day 3	n/a
	amount of exess of stress loss over DFW, day 4	n/a
	amount of exess of stress loss over DFW, day 5	n/a
	amount of exess of stress loss over DFW, day 6	n/a
	amount of exess of stress loss over DFW, day 7	n/a
	amount of exess of stress loss over DFW, day 8	n/a
	amount of exess of stress loss over DFW, day 9	n/a
	amount of exess of stress loss over DFW, day 10	n/a
	d) what was the actual largest aggregate credit exposure (in excess of initial	Mn. EURO
	margin) to any single participants and their affiliates	[4]
	i. maximum of daily values	n/a
	ii. average over daily values	n/a
	e) the estimated largest aggregate stress loss (in excess of initial margin)	
	that would be caused by the default of any two participant and its	
	affiliates (including transactions cleared for indirect participants) in	previous 12 months
	extreme but plausible market conditions?	Mn. EURO
	i. maximum of daily values	319,2
	ii. average over daily values	178,1
	iii. number of days where stress loss exeeded DFW	0
	iv. amount of exess of stress loss over DFW, day 1	0,0
	amount of exess of stress loss over DFW, day 2	0,0
	amount of exess of stress loss over DFW, day 3	n/a
	amount of exess of stress loss over DFW, day 4	n/a
	amount of exess of stress loss over DFW, day 5	n/a
	amount of exess of stress loss over DFW, day 6	n/a
	amount of exess of stress loss over DFW, day 7	n/a
	amount of exess of stress loss over DFW, day 8 amount of exess of stress loss over DFW, day 9	n/a n/a
	4430 amount of exess of stress loss over DFW, day 9	n/a
	f) what was the actual largest aggregate credit exposure (in excess of initial	
	margin) to any two participants and their affiliates	[4]
	i. maximum of daily values	n/a
	ii. average over daily values	n/a
5.	5000 Collateral (Principle 5)	
5.1	Assets eligible as initial margin, and the respective haircuts applied	
	http://www.ecc.de/ecc-en/risk-management/collateral-management	/overview
5.2	Assets eligible for pre-funded participant contributions to the default	
	resources, and the respective haircuts applied	l, .
5 2	http://www.ecc.de/ecc-en/risk-management/collateral-management	ì
5.3	Collateral Backtesting	previous 12 months 99
	i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets	
	1	3 days 255 days
	5303 iii. look-back period 5304 _{iv.} number of days during look-back where fall in value exceeded	233 days
	haircuts	
6.	6000 Margin (Principle 6)	!
Initial N		
		As at quarter end
6.1	Initial Margin Requirement by type of segregation	Mn. EURO
	6101 a) House	<2% overall
	b) non-segregated	2.142,0
	6103 c) segregated clients [5]	< 2% overall
	6104 Initial Margin Requirement for indirect participants: gross or net?	net
		As at quarter end
6.2	Initial margin received by type of segregation	Mn. EURO
0.2	a) House	[6]
	Cash	[0]
ļ	1	1



IOSCO DI	sciosare for central counterparties 17/2017	2 0 0 0
6201	total Cash	< 2% overall
6202	deposited at a central bank of issue of the currency	[2]
6203	Cash deposited at other central banks	[2]
6204	Secured cash at commercial banks (including reverse repo)	[2]
6205	Unsecured cash deposited at commercial banks	[2]
	Bonds (market value - w/o haircuts)	
6206	Sovereign Government Bonds - domestic	0,0
6207	Sovereign Government Bonds - foreign	0,0
6208	Agency	0,0
6209	Supranational Agency	0,0
6210	State / Provincial / Municipal - domestic	0,0
6211	State / Provincial / Municipal - foreign	0,0
6212	other Bonds	0,0
	Bonds (collateral value - post haircuts)	
6213	Sovereign Government Bonds - domestic	0,0
6214	Sovereign Government Bonds - foreign	0,0
6215	Agency	0,0
6216	Supranational Agency	0,0
6217	State / Provincial / Municipal - domestic	0,0
6218	State / Provincial / Municipal - foreign	0,0
6219	other Bonds	0,0
	b) non-segregated	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Cash	
6220	total Cash	2.016,3
6221	deposited at a central bank of issue of the currency	[2]
6222	Cash deposited at other central banks	[2]
6223	Secured cash at commercial banks (including reverse repo)	[2]
6224	Unsecured cash deposited at commercial banks	[2]
	Bonds (market value - w/o haircuts)	
6225	Sovereign Government Bonds - domestic	28,3
6226	Sovereign Government Bonds - foreign	0,0
6227	Agency	77,8
6228	Supranational Agency	0,0
6229	State / Provincial / Municipal - domestic	36,5
6230	State / Provincial / Municipal -foreign	0,0
6231	other Bonds	46,2
0231	Bonds (collateral value - post haircuts)	0,0
6232	Sovereign Government Bonds - domestic	25,2
6233	Sovereign Government Bonds - foreign	0,0
6234	Agency	74,1
6235	Supranational Agency State / Provincial / Municipal - domestic	0,0
6236	•	34,8
6237	State / Provincial / Municipal - foreign other Bonds	0,0
6238		41,2
ľ	c) segregated clients [5] Cash	[6]
6239	total Cash	[6] < 2% overall
6240	deposited at a central bank of issue of the currency	[2]
6241	Cash deposited at other central banks	[2]
6242	Secured cash at commercial banks (including reverse repo)	[2]
6243	Unsecured cash deposited at commercial banks	[2]
3243	Bonds (market value - w/o haircuts)	[2]
6244	Sovereign Government Bonds - domestic	0,0
6245	Sovereign Government Bonds - foreign	0,0
6246	Agency	0,0
6247	Supranational Agency	0,0
6248	State / Provincial / Municipal - domestic	0,0
6249	State / Provincial / Municipal - foreign	0,0
6250	other Bonds	0,0
		1

•		nmodity Clearing AG Disclosure for Central Counterparties IV/2017	> ecc
	6251 6252 6253 6254 6255 6256	Bonds (collateral value - post haircuts) Sovereign Government Bonds - domestic Sovereign Government Bonds - foreign Agency Supranational Agency State / Provincial / Municipal - domestic	0,0 0,0 0,0 0,0 0,0 0,0 0,0
6.3	6301	Initial margin rates on individual contracts, where the CCP sets such rates	[7]
6.4	6401 6402 6403 6404 6405	Look Back Period Weighting on historical data Close Out Periods Rates and Credits http://www.ecc.de/ecc-en/risk-mai	99% 1 Year (250 Trading Days) Exponential Weighting with Lambda = 0.99 2 days nagement/reports_and_files Daily
6.5	6501 6502 6503	b) Number of observations where IM fell below mark-to-market c) Achieved coverage level	prev. 12 months, daily basis 11 14 100,0% continuously
	6505 6506 6507	e) If once a day, specify at what time of day. f)	n/a Mn. EURO 2,9 0,3
Margin	Calls		IAauaaa aauauauau
6.6	6601	Average total variation margin paid to the CCP by participants each business day.	Average over quarter Mn. EURO 30,4 Maximum over quarter
6.7	6701	Maximum total variation margin paid to the CCP on any given business day over the period.	Mn. EURO 59,3 Maximum over quarter
6.8	6801	Maximum aggregate initial margin call on any given business day over the period.	Mn. EURO 150,9
<u>7.</u>		Liquidity Risk (Principle 7)	
7.1	7101 7102	'Cover 1' or 'Cover 2'. Size and composition of qualifying liquid resources for each clearing service, for each relevant currency a) Cash deposited at a central bank of issue of the currency concerned i. EUR	Mn. EURO As at quarter end 2.155,8
	7109		0,0
	7116		0,0
		h) Cash denosited at other central hanks	As at quarter and

09.03.2018	
IV/2017	

7103

7110

7117

7104

7111

ii. GBP

i. EUR

ii. GBP

b) Cash deposited at other central banks

c) Secured cash deposited at commercial banks (including reverse repo)

0,0 0,0

0,0

0,0

0,0

As at quarter end

As at quarter end



CPIVII-I	OSCO D	disclosure for Central Counterparties 17/2017	/ CCC
	7118		0,0
		d) Unsecured cash deposited at commercial banks	
	7105		9,0
	7112		0,3
	7119		0,1
		e) secured committed lines of credit including committed foreign exchange	As at quarter end
		swaps and committed repos	
	7106	i. EUR	0,0
	7113		0,0
	7120		0,0
		f) unsecured committed lines of credit which the CCP may draw without	As at quarter end
		providing collateral/security	
	7107		0,0
	7114		0,0
	7121		0,0
		g) highly marketable collateral held in custody and investments that are	As at quarter end
		readily available and convertible into cash with prearranged and highly	
		reliable funding arrangements even in extreme but plausible market	
		conditions	[9]
	7108		0,0
	7115		0,0
	7122		0,0
		h) other	
		i. EUR	0,0
		ii. GBP	0,0
		iii. USD	0,0
		i) State whether the CCP has routine access to central bank liquidity or	As at quarter end
		facilities.	
	7123		yes - intraday facility
	7124		no
7.0	7125		no ,
7.2	7201	Supplementary Liquidity over those from 7.1 Largest same-day payment obligation in total that would be caused by the	n/a
7.3		default of any single participant and its affiliates in extreme but plausible	
		market conditions?	previous quarter Mn. EURO
	7201	l	
	7301 7302		537,7
	/302	ii. number of days where estimated payment exceeded liquidity iii. amount of excess on each day:	1
	7202	l	-220,0
	7303 7304		-220,0 n/a
		amount of exess of payment over liq., day 2	n/a
	7305 7306	amount of exess of payment over liq., day 4	n/a
	7307	amount of exess of payment over liq., day 5	n/a
	7308		n/a
	7309	amount of exess of payment over liq., day 7	n/a
	7310	l	n/a
	7310	amount of exess of payment over liq., day 9	n/a
	7312		n/a
	, 512	actual largest payment obligation to a single participant over the	11/4
	7313		n/a
12.		Exchange of Value Settlement Systems (Principle 12)	
12.1		Percentage of settlements by value effected using a DvP, DvD or PvP	
	12101	settlement	n/a
12.2		Percentage of settlements by volume effected using a DvP, DvD or PvP	
	12201	settlement mechanism	n/a
			•
		•	



	1 1	' '	
13	ı ı	Default Rules and Procedures (Principle 13)	
13.1		Quantitative information related to past defaults	
	13101	a) amount of loss vs. amount of margin	n/a
	13102	b) amount of other financial resources used to cover losses	n/a
	13103	c) proportion of client positions closed-out/ported	n/a
14.		Segregation and Portability (Principle 14)	
14.1		Total client positions (Open Interest) as a share of notional values, by type	
		of segregation	[6]
		a) basis: OI short side	
	14101	i. HOUSE	< 5%
	14102	ii. ISA	< 5%
	14103	iii. LSOC/GOS	> 95%
	14104	iv. SOS	< 5%
		b) basis: OI long side	, F0/
	14105	i. HOUSE ii. ISA	< 5% < 5%
	14106 14107	iii. LSOC/GOS	> 95%
	14107	iv. SOS	< 5%
15.		General Business Risk (Prinicple 15)	
4= 4) (((((((((Mn. EURO
15.1		a) value of liquid net assets funded by equity (EMIR capital)	80,6
15.2		b) six months of current operating expenses Financial disclosures	18,2
15.2		a) total revenue	[10] 83.140.649 €
		b) total expenditure	42.002.633 €
		c) profits	41.215.218 €
		d) total assets	2.751.310.200 €
		e) total liabilities	2.751.310.200€
	15206		All Cash pledged by
		Explain if collateral posted by clearing participants is held on or off the	participants is held on the
		CCP's balance sheet	balance sheet
15.3		Income breakdowns	
		a) percentage of income from clearing feesb) percentage of income from reinvestment of assests provided by clearing	100%
	15302	participants	0%
16.	<u> </u>	Custody and Investment Risks (Principle 16)	<u> </u>
		custouy and investment histo (i interpre 20)	As at quarter end
			Mn. EURO
16.1		Total Cash received by the CCP from participants	2.259,9
		Total Cash received by the CCP from participants: Default Fund contributions	
16.2		Total Cash received by the CCP from participants: Initial Margins	2.057,5
16.2	16201	Investment of Cash: Deposits a) deposits at central banks of issue of the currency	100%
	16201	b) deposits at other central banks	0%
	16203	c) secured deposits at commercial banks	0%
	16204	d) unsecured deposits at commercial banks	0%
	16205	e) money market funds	0%
	16206	f) other	0%
	16207	g) Cash - EUR	100%
	16208	h) Cash - GBP	0%
	16209	i) Cash - USD	0%
	16210	j) weighted average maturity of deposits and funds (days)	< 1
	16211	Investment of Cash: Securities a) domestic sovereign government bonds	0%
	16211	b) foreign sovereign government bonds	0%
	16213	c) agency bonds	0%
	16214	d) state/ provincial / municipal bonds	0%

European Commodity Clearing AG > ecc CPMI-IOSCO Disclosure for Central Counterparties IV/2017 e) other instruments 0% 16215 16216 f) percentage split by currency 0% g) percentage split by currency 0% 16217 0% 16218 h) percentage split by currency weighted average maturity of these securities 0 16219 Investment of Cash: Investment Risk 16220 VaR(99%) of total investment portfolio n/a 16221 **Limit for Investment Counterparty** individual limits, see [11] Number of limit breaches 16222 16.3 16301 Investment of Cash: Rehypothetication of Cash none ECC does not use the instrument of rehypothetication of cash for investment 17. Operational Risk (Principle 17) 17.1 17101 Operational availability targets for the core systems involved in clearing n/a 17201 Achieved availability of the core systems, previous twelve months 17.2 n/a 17.3 17301 Total number of failures affecting the core systems, previous twelve months n/a 17302 Total duration of failures affecting the core systems, previous twelve months n/a 17.4 17401 Recovery time objectives (in hours) 2 18. Access and Participation Requirements (Principle 18) 18.1 Number of clearing members by type and origin as at quarter end a) DCM domestic 1 18101 18102 b) DCM foreign 3 c) GCM domestic 1 18103 18104 d) GCM foreign 18 e) DCP domestic 0 18105 11 f) DCP foreign 18106 18.2 Percentage of OI held by Top5 CM: daily average over quarter 18201 a) basis: long side 82% b) basis: short side 80% 18202 Percentage of OI held by Top5 CM: peak EoD over quarter c) basis: long side 84% 18203 d) basis: short side 81% 18204 18.3 Percentage of IM posted by Top5 CMs 75% 18301 a) peak EoD over quarter 18302 b) daily average over quarter 74% 18.4 18401 Percentage of Top5 CM contributions to CF 63% 19. Tiered Participation Arrangements (Principle 19) 19.1 Measures of concentraion of client clearing 19101 a) Number of known clients 515 b) Number of CM clearing for clients 19102 19 19103 c) Client OI attributale to Top5 CM 84% 19104 d) Client OI attributale to Top5 CM 85%



Comments and Explanations

- According to the Clearing Conditions, ECC may request the non-defaulting Clearing Members to replenish their default fund contributions within 10 days after a Clearing Member has been set into default and the default fund has been fully or partially utilized. The amount reported here as replenishment assumes the default of the largest Clearing Member. It is calculated as the total Default Fund Contributions of all Clearing Members less the conribution of the largest Clearingmember.
- ECC maintains cash collateral provided in EURO for initial margin requirements and the default fund contributions at first at its TARGET2 account. ECC does not separate its holdings of cash and cash investments between default fund contributions and margin contributions.
 - According to ECC's collateral policy, ECC does not accept "other types" of collteral for the default fund.
- [3] See also https://www.ecc.de/ecc-en/risk-management/collateral-management
- ECC does not invest funds with the top five Clearingmembers (according to initial margin requirement) or its affiliates. Therefore, the credit exposures with clients and participants are determined by the clearing service, but not influenced by other creditor relationsships to the Clearing Members.
- Under the term "Segreated Clients", ISA, OSA and SOS segregated accounts are comprised.
- [6] Values are provided in ranges for data protection reasons.
- All margin calculations are based on a general modelling approach either for derivatives or for spot products. The statistical models and all relevant changes to them are part of a regulatory oversight process. They are based on conservative assumptions which are validated once a year by external parties. Information concerning the margining approach can be found under:

 https://www.ecc.de/ecc-en/risk-management/margining
- Days without uncovered exposure are not included in the calculation of the average value. [8]
- Based on ECCs obligation to maintain liquidity for the default of the largest two Clearing Members, reported here are highly secure and liquid securities provided by all Clearing Members as contribution to the Clearing Funds as well as securities provided by the top two Clearing Members as collateral for their initial margin requirement.
- Values taken from the latest audited annual financial statement. See also [10] https://www.ecc.de/ecc-en/about-ecc/company/reports
- ECC sets individual limits for every single investment counterparty with regard to types of investment as well as overall limits for the individual counterparty and the counterparties company group. These limits are based on an internal risk assessment using different external data sources including external rating agencies.

IV/2017

