

## European Commodity Clearing AG

# CPMI-IOSCO Disclosure for Central Counterparties III/2018



	Index	disclosure item	date, type, value
4.	4000	Credit Risk (Principle 4)	
		Total value of default resources (excluding initial and retained variation	As at quarter end
		margin), split by clearing service if default funds are segregated by clearing	Mn. EURO
4.1		service	(Bonds at collateral value)
	4101	a) pre-funded	914.9
	4101	own capital that forms part of the default waterfall (used before	514.5
	4103		11.5
	4102		903.4
	1102	iii. other	0.0
	4104	b) committed	n/a
	4105		, 2
		default	11.5
	4106		11.5
		default	515.6
	4107		515.0
		deal with a subsequent participant default. [1]	515.6
		iv. other	n/a
4.2	4201	КССР	924,869.0
	.201		
		Value of pre-funded default resources (excluding initial and retained	As at quarter end
4.3		variation margin)	Mn. EURO
4.5	4301	a) total Cash	741.8
	4301		[2]
	4302		[2]
	4303		[2]
	4304		[2]
	4303	b) Bonds at market value w/o haircut	[2]
	4306		1.7
	4300		49.7
	4307		33.6
	4308		61.7
	4303		0.0
	4310		18.6
	4311		5.0
	4512	c) Bonds at collateral value (post haircut)	5:0
	4313		1.5
	4313		48.0
	4314		31.3
	4315		59.5
			0.0
	4317		16.5
	4318 4319		4.4
	4319	d) other	[3]
			[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
		b) assumed close out period (days)	2
	4402	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	provious 12 months
			previous 12 months
		extreme but plausible market conditions?	Mn. EURO
	4403	,	563.0
	4404	5 1	151.5
	4405		0
	4406	, ,	n/a
	4407	amount of exess of stress loss over DFW, day 2	n/a

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	4408 amount of exess of stress loss over DFW, day 3	n/a
	amount of exess of stress loss over DFW, day 4	n/a
	4410 amount of exess of stress loss over DFW, day 5	n/a
	4411 amount of exess of stress loss over DFW, day 6	n/a
	4412 amount of exess of stress loss over DFW, day 7	n/a
	<ul> <li>amount of exess of stress loss over DFW, day 8</li> <li>amount of exess of stress loss over DFW, day 9</li> </ul>	n/a n/a
	4414 amount of exess of stress loss over DFW, day 9 4415 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	
	margin) to any single participants and their affiliates	[4]
	4416 i. maximum of daily values	n/a
	4417 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
	4418 i. maximum of daily values	690.6 210.2
	<ul><li>4419 ii. average over daily values</li><li>4420 iii. number of days where stress loss exeeded DFW</li></ul>	0
	4421 iv. amount of exess of stress loss over DFW, day 1	n/a
	amount of exess of stress loss over DFW, day 2	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
	4426 amount of exess of stress loss over DFW, day 6	n/a
	4427 amount of exess of stress loss over DFW, day 7	n/a
	<ul> <li>amount of exess of stress loss over DFW, day 8</li> <li>amount of exess of stress loss over DFW, day 9</li> </ul>	n/a n/a
	amount of exess of stress loss over DFW, day 9 amount of exess of stress loss over DFW, day 10	n/a
	f) what was the actual largest aggregate credit exposure (in excess of initial	
	margin) to any two participants and their affiliates	[4]
	4431 i. maximum of daily values	n/a
	4432 ii. average over daily values	n/a
<u>5.</u> 5.1	5000 Collateral (Principle 5) 5101 Assets eligible as initial margin, and the respective haircuts applied	
5.1	http://www.ecc.de/ecc-en/risk-management/collateral-management	l /overview
5.2	5201 Assets eligible for pre-funded participant contributions to the default	
	resources, and the respective haircuts applied	
	http://www.ecc.de/ecc-en/risk-management/collateral-management	/overview
5.3	Collateral Backtesting	previous 12 months
	5301 i. confidence interval targeted for haircuts	. 99
	5302 ii. assumed holding/liquidation period for the assets	3 days
	<ul> <li>iii. look-back period</li> <li>iv. number of days during look-back where fall in value exceeded</li> </ul>	255 days
	haircuts	0
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
	6102 b) non-segregated	4,154.7
	6103 c) segregated clients [5] 6104 Initial Margin Requirement for indirect participants: gross or net?	> 2%/ < 5% overall net
		net
		As at quarter end
6.2	Initial margin received by type of segregation	Mn. EURO
	a) House	[6]
	Cash	
	6201 total Cash	< 2% overall

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6202 6203	deposited at a central bank of issue of the currency Cash deposited at other central banks	[2]
6204 6205	Secured cash at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks Bonds (market value - w/o haircuts)	[2]
6206 6207	Sovereign Government Bonds - domestic Sovereign Government Bonds - foreign	0.0 0.0
6208	Agency	0.0
6209	Supranational Agency	0.0
6210	State / Provincial / Municipal - domestic	0.0
6211 6212	State / Provincial / Municipal - foreign other Bonds	0.0 0.0
0212	Bonds (collateral value - post haircuts)	0.0
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	4,114.2
6220	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	19.2
6226	Sovereign Government Bonds - foreign	0.7
6227	Agency	98.9
6228	Supranational Agency	93.6 218.3
6229	State / Provincial / Municipal - domestic	
6230	State / Provincial / Municipal -foreign other Bonds	0.0 31.1
6231	Bonds (collateral value - post haircuts)	0.0
6232	Sovereign Government Bonds - domestic	18.3
6233	Sovereign Government Bonds - foreign	0.7
6234	Agency	93.4
6235	Supranational Agency	90.7
6236	State / Provincial / Municipal - domestic	209.1
6237	State / Provincial / Municipal - foreign	0.0
6238	other Bonds c) segregated clients [5]	27.2
	Cash	
6239	total Cash	259.3
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]
	Bonds (market value - w/o haircuts)	
6244	Sovereign Government Bonds - domestic	0.0
6245	Sovereign Government Bonds - foreign	0.0
6246	Agency Supranational Agency	0.0 0.0
6247 6248	State / Provincial / Municipal - domestic	0.0
6248	State / Provincial / Municipal - foreign	0.0
6250	other Bonds	0.0
	Bonds (collateral value - post haircuts)	0.0

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	6251 6252		0.0
	6253	<b>3</b> ,	0.0
	6254		0.0
	6255 6256		0.0
	6257		0.0
6.3	6301	Initial margin rates on individual contracts, where the CCP sets such rates	[7]
6.4		Type of initial margin model used and key model design parameters	
	6401	6	99%
	6402		1 Year (250 Trading Days) Exponential Weighting
	6403		with Lambda = 0.99 2 days
	6404		
	6405	Rates and Credits	http://www.ecc.de/ecc-
	6406	Update Frequency	Daily
6.5		Results of back-testing of initial margin Reported are the aggregate results counting outliers of IM calculation at	prev. 12 months, daily basis
	6501	the level of each Non-Clearing Member at ECC. a) Number of days where IM fell below mark-to-market	21
	6502		133
	6503		99.78%
	6504 6505		continuously n/a Mn. EURO
	6506	i. breaches of initial margin: peak uncovered exposure	216.4
Margin	6507 Calls	ii. breaches of initial margin: average uncovered exposure [8]	5.5
wargin			Average over quarter
6.6		Average total variation margin paid to the CCP	Mn. EURO
	6601	by participants each business day.	103.2
6.7		Maximum total variation margin paid to the CCP on any given business day	Maximum over quarter Mn. EURO
0.7	6701	over the period.	811.4
			Maximum over quarter
6.8		Maximum aggregate initial margin call on any given business day over the	Mn. EURO
	6801	period.	333.1
7.	7101	Liquidity Risk (Principle 7)	Cauger2
7.1	7101	'Cover 1' or 'Cover 2'. Size and composition of qualifying liquid resources for each clearing service,	Cover2
		for each relevant currency	Mn. EURO
		a) Cash deposited at a central bank of issue of the currency concerned	As at quarter end
	7102	i. EUR	4,950.7
	7109		0.0
	7116		0.0
	74.00	b) Cash deposited at other central banks	As at quarter end
	7103 7110		0.0
	7110		0.0
		c) Secured cash deposited at commercial banks (including reverse repo)	As at quarter end
	7104		0.0
	7111	ii. GBP	0.0

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	7118	iii. USD		0.0
		d) Unsecured cash deposited at commercial banks		
	7105			23.0
	7112			0.5
	7119			0.0
	, 115	e) secured committed lines of credit including committed foreign exchange	As at quarter end	0.0
		swaps and committed repos		
	7106			0.0
	7100			0.0
	7113			0.0
	/120	f) unsecured committed lines of credit which the CCP may draw without	As at quarter and	0.0
		providing collateral/security	As at quarter end	
	7407			0.0
	7107			0.0
	7114			0.0
	7121			0.0
		g) highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly	As at quarter end	
		reliable funding arrangements even in extreme but plausible market		
		conditions		[9]
	7108			170.4
	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	i. EUR	yes - intrada	y facility
	7124	ii. GBP		no
	7125	iii. USD		no
7.2	7201	Supplementary Liquidity over those from 7.1		n/a
7.3		Largest same-day payment obligation in total that would be caused by the		•
		default of any single participant and its affiliates in extreme but plausible	previous quarter	
		market conditions?	Mn. EURO	
	7301			1,096.9
	7302			0
	,001	iii. amount of excess on each day:		· ·
	7303			n/a
	7304			n/a
	7304			n/a
	7306	amount of exess of payment over liq., day 4		n/a n/a
	7307			
	7308			n/a
	7309			n/a
	7310			n/a
	7311	amount of exess of payment over liq., day 9		n/a
	7312	amount of exess of payment over liq., day 10		n/a
		actual largest payment obligation to a single participant over the		,
	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
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13	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) Total client positions (Open Interest) as a share of notional values, by type	<u>г</u>
14.1	of segregation	[6]
	a) basis: OI short side	[6]
	14101 i. HOUSE	< 5%
	14101 I. HOOSE 14102 II. ISA	< 5%
		85%
		12%
		12%
	b) basis: OI long side 14105 i. HOUSE	< F9/
		< 5% < 5%
	14106 ii. ISA	84%
	14107 iii. LSOC/GOS 14108 iv. SOS	12%
15.	14108 iv. SOS General Business Risk (Prinicple 15)	12%
15.		Mn. EURO
15.1	15101 a) value of liquid net assets funded by equity (EMIR capital)	88.9
	15102 b) six months of current operating expenses	18.2
15.2	Financial disclosures	[10]
	15201 a) total revenue	83.2
	15202 b) total expenditure	42.0
	15203 c) profits	41.2
	15204 d) total assets	2,751.3
	15205 e) total liabilities	2,751.3
	15206 f)	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	Subtree Sheet
	15301 a) percentage of income from clearing fees	100%
	15302 b) percentage of income from reinvestment of assests provided by clearing	0%
	participants	
16.	Custody and Investment Risks (Principle 16)	- -
		As at quarter end
10.1	respectively the CCD from nontining to	Mn. EURO
16.1	16101 Total Cash received by the CCP from participants	4,856.5
	16102 Total Cash received by the CCP from participants: Default Fund contribution	. 742.3 4,114.2
16.2	16103 Total Cash received by the CCP from participants: Initial Margins Investment of Cash: Deposits	4,114.2
10.2	16201 a) deposits at central banks of issue of the currency	100%
	16202 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
	Investment of Cash: Securities	
	16211 a) domestic sovereign government bonds	0%
	16212 b) foreign sovereign government bonds	0%
		070
	16213 c) agency bonds	0%

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	16215	e) other instruments	0%
	16216	f) percentage split by currency	0%
	16217	g) percentage split by currency	0%
	16218		0%
	16219		0
		Investment of Cash: Investment Risk	
	16220	VaR(99%) of total investment portfolio	n/a
	16221		individual limits, see [11]
	16222		3
	10222		5
16.3	10201	Investment of Cach: Robunathotication of Cach	2020
10.5	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)	00.000/
17.1		Operational availability targets for the core systems involved in clearing	99.00%
17.2		Achieved availability of the core systems, previous twelve months	99.01%
17.3		Total number of failures affecting the core systems, previous twelve months	
		Total duration of failures affecting the core systems, previous twelve months	88.47
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
	18101	a) DCM domestic	1
	18102	b) DCM foreign	3
	18103	c) GCM domestic	2
	18104	d) GCM foreign	19
	18105		4
	18106		19
18.2	10100	Percentage of OI held by Top5 CM: daily average over quarter	
10.2	18201		78%
	18201	b) basis: short side	77%
	10202	Percentage of OI held by Top5 CM: peak EoD over quarter	/ / //6
	10202		80%
	18203	, 8	
10.2	18204	,	80%
18.3		Percentage of IM posted by Top5 CMs	750/
	18301	, , , , , , , , , , , , , , , , , , , ,	75%
	18302	, , , ,	74%
18.4	18401	Percentage of Top5 CM contributions to CF	71%
<u>19.</u>		Tiered Participation Arrangements (Principle 19)	
19.1		Measures of concentraion of client clearing	
	19101	,	532
	19102	,	21
	19103	c) Client OI attributale to Top5 CM	80%
	19104	d) Client OI attributale to Top5 CM	82%
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	Comments and Explanations
[1]	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
[2]	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.
[3]	According to ECC's collateral policy, ECC does not accept "other types" of collteral for the default fund. See also https://www.ecc.de/ecc-en/risk-management/collateral-management
[4]	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.
[5]	
[6]	Values are provided in ranges for data protection reasons.
[7]	All margin calculations are based on a general modelling approach either for derivatives or for spot products. The statistical models and all Days without uncovered exposure are not included in the calculation of the average value.
[8]	
[9]	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
[10]	Values taken from the latest audited annual financial statement. See also https://www.ecc.de/ecc-en/about-ecc/company/reports
[11]	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

