

CPMI-IOSCO Disclosure for Central Counterparties IV/2016



			Clearing
	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	(collateral value)
	4101	a) pre-funded	288.2
	4101	own capital that forms part of the default waterfall (used before	200.2
	4103		7.5
	4102		280.7
	-	iii. other	0.0
	4104	b) committed	n/a
		own/parent funds that are committed to address a participant	
	4105		n/a
		aggregate participant commitments to address an initial participant	
	4106		n/a
		aggregate participant commitments to replenish the default fund to	
	4107		209.0
		iv. other	n/a
2	4201	КССР	0.0
		Value of pre-funded default resources (excluding initial and retained	As at quarter end
.3		variation margin)	Mn. EURO
J	4301	a) total Cash	237.4
	4301		[2]
	4303		[2]
	4304		[2]
	4305		[2]
		b) Bonds at market value w/o haircut	
	4306	i. Agency	4.1
	4307	ii. Sovereign Government Bonds - domestic	3.4
	4308	iii. Sovereign Government Bonds - foreign	15.9
	4309		16.1
	4310		0.0
	4311		5.0
	4312		1.5
		c) Bonds at collateral value (post haircut)	2.0
	4313	3 ,	3.9
	4314		3.2 14.5
	4315 4316		14.5
	4310		0.0
	4317		4.8
	4319		1.3
		d) other	[3]
.4		a) State whether the CCP is subject to a minimum "Cover 1" or "Cover 2"	As at quarter end
	4401	requirement in relation to total pre-funded default resources	Cover 2
	4402	b) assumed close out period (days)	2
		c) the estimated largest aggregate stress loss (in excess of initial margin)	
		that would be caused by the default of any single participant and its	
		affiliates (including transactions cleared for indirect participants) in	previous 12 months
		extreme but plausible market conditions?	Mn. EURO
	4403	,	309.4
	4404	5 1	84.6
	4405		0
	4406	· · ·	n/a
	4407		n/a
	4408	amount of exess of stress loss over DFW, day 3	n/a

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	4408	, ,	n/a
	4409	, 1	n/a
	4410		n/a
	4411	, 1	n/a
	4412		n/a
	4413		n/a
	4414	, 1	n/a
	4415	, ,	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	5 7	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	370.6
	4419	ii. average over daily values	117.6
	4420	iii. number of days where stress loss exeeded DFW	6
	4421	iv. amount of exess of stress loss over DFW, day 1	-11.4
	4422	amount of exess of stress loss over DFW, day 2	-4.8
	4423	amount of exess of stress loss over DFW, day 3	-2.5
	4424	amount of exess of stress loss over DFW, day 4	-9.0
	4425	amount of exess of stress loss over DFW, day 5	-76.0
	4426	amount of exess of stress loss over DFW, day 6	-77.3
	4427	amount of exess of stress loss over DFW, day 7	n/a
	4428	amount of exess of stress loss over DFW, day 8	n/a
	4429	amount of exess of stress loss over DFW, day 9	n/a
	4430	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		n/a
5.	5000	Collateral (Principle 5)	
5.1	5101	Assets eligible as initial margin, and the respective haircuts applied	
		http://www.ecc.de/ecc-en/risk-management/collateral-management	t/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
	5303		255 days
	5304	iv. number of days during look-back where fall in value exceeded	0
		haircuts	
6.	6000	Margin (Principle 6)	
Initial I	Margin		
			As at quarter end
6.1		Initial Margin Requirement by type of segregation	Mn. EURO
	6101	a) House	0
	6102	b) non-segregated	2,633.1
	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
		a) House	[6]
		Cash	
	6201	total Cash	< 2% overall
24.01.2	2017		

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6202	,	[2]
6203		[2]
6204 6205		[2]
0203	Bonds (market value - w/o haircuts)	[2]
6206		0.0
6207	Sovereign Government Bonds - foreign	0.0
6208	0,	0.0
6209		0.0
6210		0.0
6211		0.0
6212	e other Bonds Bonds (collateral value - post haircuts)	0.0
6213		0.0
6214		0.0
6215		0.0
6216		0.0
6217		0.0
6218		0.0
6219	other Bonds	0.0
	b) non-segregated	
	Cash	
6220		2,710.1
6221	, , , , , , , , , , , , , , , , , , , ,	[2]
6222		[2]
6223 6224		[2]
0224	Bonds (market value - w/o haircuts)	[2]
6225		62.8
6226		10.4
6227		68.7
6228	Supranational Agency	0.0
6229	State / Provincial / Municipal - domestic	32.7
6230	State / Provincial / Municipal -foreign	0.0
6231	other Bonds	24.5
	Bonds (collateral value - post haircuts)	0.0
6232		60.5
6233		9.3
6234		65.1
6235		0.0
6236		31.6
6237 6238		0.0 21.0
0250	c) segregated clients [5]	21.0
	Cash	[6]
6239	total Cash	< 2% overall
6240	deposited at a central bank of issue of the currency	[2]
6241	Cash deposited at other central banks	[2]
6242		[2]
6243	•	[2]
	Bonds (market value - w/o haircuts)	
6244	0	0.0
6245	5	0.0 0.0
6246 6247		0.0
6247		0.0
6249		0.0
6250		0.0
	Bonds (collateral value - post haircuts)	0.0

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	6251		Clearing 0.0
	6252		0.0
	6253		0.0
	6254		0.0
	6255		0.0
	6256		0.0
	6257	other Bonds	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	Look Back Period	1 Year (250 Trading Days) Exponential Weighting
	6403	Weighting on historical data	with Lambda = 0.99
	6404		2 days
	6405	Rates and Credits	
		http://www.ecc.de/ecc-en/risk-ma	
	6406	Update Frequency	Daily
6.5		Results of back-testing of initial margin	prev. 12 months, daily basis
0.5		Reported are the aggregate results counting outliers of IM calculation at	prev. 12 months, daily basis
		the level of each Non-Clearing Member at ECC.	
	6501	-	46
	6502	b) Number of observations where IM fell below mark-to-market	52
	6503	c) Achieved coverage level	99.9%
	6504	d) Specify if measured intraday/continuously or only once a day.	continuously
	6505		n/a
		f)	, Mn. EURO
	6506	i. breaches of initial margin: peak uncovered exposure	14.8
	6507	ii. breaches of initial margin: average uncovered exposure [8]	0.5
Margir	n Calls	[Average over quarter
6.6		Average total variation margin paid to the CCP	Mn. EURO
0.0	6601	by participants each business day.	72.2
			Maximum over quarter
6.7		Maximum total variation margin paid to the CCP on any given business day	Mn. EURO
	6701	over the period.	240.7
			Maximum over quarter
6.8		Maximum aggregate initial margin call on any given business day over the	Mn. EURO
7.	6801	period. Liquidity Risk (Principle 7)	365.5
7.1	7101	'Cover 1' or 'Cover 2'.	Cover2
7.1	/101	Size and composition of qualifying liquid resources for each clearing service,	
		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	3,017.8
	7109		0.0
	7116		0.0
		b) Cash deposited at other central banks	As at quarter end
	7103		0.0 0.0
	7110 7117		0.0
	,,	c) Secured cash deposited at commercial banks (including reverse repo)	As at quarter end
	7104		0.0
	7111		0.0
	7118	iii. USD	0.0

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		Clearing
	d) Unsecured cash deposited at commercial banks 7105 i. EUR	16.7
	7105 i. EUR 7112 ii. GBP	0.5
	7119 iii. USD	0.0
	e) secured committed lines of credit including committed foreign exchange	
	swaps and committed repos	
	7106 i. EUR	0.0
	7113 ii. GBP	0.0
	7120 iii. USD	0.0
	f) unsecured committed lines of credit which the CCP may draw without	As at quarter end
	providing collateral/security	
	7107 i. EUR	0.0
	7114 ii. GBP	0.0
	7121 iii. USD	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 i. EUR	46.1
	7115 ii. GBP	0.0
	7122 iii. USD	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 - intraday 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 i. maximum estimated amount	670.1
	7302 ii. number of days where estimated payment exceeded liquidity	0
	iii. amount of excess on each day:	- 1-
	7303 amount of exess of payment over liq., day 1	n/a
	amount of exess of payment over liq., day 2	n/a
	7305 amount of exess of payment over liq., day 3	n/a
	amount of exess of payment over liq., day 4amount of exess of payment over liq., day 5	n/a
		n/a
		n/a n/a
	 7309 amount of exess of payment over liq., day 7 7310 amount of exess of payment over liq., day 8 	n/a
	7310 amount of exess of payment over liq., day 8	n/a
		n/a
	7312 amount of exess of payment over liq., day 10 actual largest payment obligation to a single participant over the	11/d
	7313 iv. past 12 months	n/a
12.	Exchange of Value Settlement Systems (Principle 12)	170
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	,u
	12201 settlement mechanism	n/a
		, u

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13		Default Rules and Procedures (Principle 13)	
13.1		Quantitative information related to past defaults	1
	13101	, ,	n/a
	13102	,	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	0%
	14102		< 5%
	14103	iii. LSOC/GOS	> 95%
	14104		< 5%
		b) basis: OI long side	
	14105		0%
	14106		< 5%
	14107		> 95%
45	14108		< 5%
15.		General Business Risk (Prinicple 15)	Mn. EURO
15.1	15101	a) value of liquid net assets funded by equity (EMIR capital)	60.9
10.1		b) six months of current operating expenses	13.1
15.2	15102	Financial disclosures	[10]
	15201	a) total revenue	53,713,494€
		b) total expenditure	19,738,369€
		c) profits	32,248,010€
		d) total assets	1,145,334,943€
		e) total liabilities	1,145,334,943€
	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	
	15301	a) percentage of income from clearing fees	100%
	15302	b) percentage of income from reinvestment of assests provided by clearing	0%
		participants	
16.	1	Custody and Investment Risks (Principle 16)	
			As at quarter end
16.1	16104	Total Cash received by the CCD from participants	Mn. EURO
16.1		Total Cash received by the CCP from participants Total Cash received by the CCP from participants: Default Fund contributions	2,971.7 237.4
		Total Cash received by the CCP from participants. Default Fund contributions	2,734.3
16.2	10105	Investment of Cash: Deposits	2,734.3
10.2	16201		100%
	16201		0%
	16202		0%
	16203		0%
	16205		0%
	16206		0%
	16207		100%
	16208		0%
	16209		0%
	16210		<1
		Investment of Cash: Securities	
	16211		0%
	16212		0%
	16213		0%

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	16215		O%
	16215		0%
	16217		0%
	16218		0%
	16219	i) weighted average maturity of these securities	0
		Investment of Cash: Investment Risk	
	16220	VaR(99%) of total investment portfolio	n/a
	16221		individual limits, see [11]
	16222	Number of limit breaches	0
16.3	16301	Investment of Cash: Rehypothetication of Cash ECC does not use the instrument of rehypothetication of cash for	none
		investment	
17.		Operational Risk (Principle 17)	
17.1		Operational availability targets for the core systems involved in clearing	n/a
17.2		Achieved availability of the core systems, previous twelve months	n/a
17.3		Total number of failures affecting the core systems, previous twelve months	
47.4		Total duration of failures affecting the core systems, previous twelve months	
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
10.1	18101		0
	18102		2
	18103		3
	18104		18
18.2		Percentage of OI held by Top5 CM: daily average over quarter	_
-	18201		80%
	18202		77%
		Percentage of OI held by Top5 CM: peak EoD over quarter	
	18203		82%
	18204		79%
18.3		Percentage of IM posted by Top5 CMs	
	18301	a) peak EoD over quarter	85%
	18302	b) daily average over quarter	82%
18.4	18401	Percentage of Top5 CM contributions to CF	68%
19.		Tiered Participation Arrangements (Principle 19)	
19.1		Measures of concentraion of client clearing	
	19101		510
	19102	,	21
	19103	,	77%
	19104	d) Client OI attributale to Top5 CM	79%



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

- [1] 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 Clearing member.
- 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.
 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.

- [5] Under the term "Segreated Clients", ISA, OSA and SOS segregated accounts are comprised.
- [6] Values are provided in ranges due to date 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
- [7] year by external parties. Information concerning the margining approach can be found under: https://www.ecc.de/ecc-en/risk-management/margining
- [8] Days without uncovered exposure are not included in the calculation of the average value.
 Based on ECCs obligation to maintain liquidity for the default of the largest two Clearing Members, reported here are highly secure and
- [9] 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 [11] 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.