



disclosure item 4. 4000 Credit Risk (Principle 4) 4.1 Total value of default resources (excluding initial and retained variation margin), As at quarter end split by clearing service if default funds are segregated by clearing service Mn. EURO (Bonds at collateral value) 4101 a) pre-funded 629.3 4103 i. own capital that forms part of the default waterfall (used before member 17.0 contributions) 4102 ii. aggregate participant contributions 589.2 4108 (aggregate participant contributions requirement, to be covered on the next (841.5)iii. other 23.0 4104 b) committed 1,247.7 4105 i. own/parent funds that are committed to address a participant default 17.0 4106 aggregate participant commitments to address an initial participant default 615.4 4107 aggregate participant commitments to replenish the default fund to deal with 615.4 a subsequent participant default (see [1]) iv. other 0.0 4.2 4201 Hypothetical Capital/K_{CCP} (SA-CCR for derivatives based; Euro) 47,812,883.0 4.3 Value of pre-funded default resources (excluding initial and retained variation As at quarter end margin) Mn. EURO 4301 a) total Cash 534.4 4302 deposited at a central bank of issue of the currency [2] 4303 Cash deposited at other central banks [2] 4304 iii. Secured cash at commercial banks (including reverse repo) [2] 4305 iv. Unsecured cash deposited at commercial banks [2] b) Bonds at market value w/o haircut 4306 i. Agency 0.0 4307 ii. Sovereign Government Bonds - domestic 6.5 4308 iii. Sovereign Government Bonds - foreign 30.7 4309 iv. State / Provincial / Municipal - domestic 8.0 4310 v. State / Provincial / Municipal - foreign 0.0 4311 vi. Supranational Agency 19.5 4312 vii. other Bonds 1.0 c) Bonds at collateral value (post haircut) 4313 i. Agency 0.0 4314 ii. Sovereign Government Bonds - domestic 6.3 4315 iii. Sovereign Government Bonds - foreign 21.5 4316 iv. State / Provincial / Municipal - domestic 7.7 4317 v. State / Provincial / Municipal - foreign 0.0 4318 vi. Supranational Agency 18.4 4319 vii. other Bonds 0.9 d) other [3] 4.4 As at quarter end 4401 a) State whether the CCP is subject to a minimum "Cover 1" or "Cover 2" Cover 2 requirement in relation to total pre-funded default resources 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 previous 12 months transactions cleared for indirect participants) in extreme but plausible market Mn. EURO conditions? 4403 maximum of daily values 508.3 4404 average over daily values 291.9 4405 iii. number of days where stress loss exeeded DFW 0 4406 iv. amount of excess of stress loss over DFW, day 1 n/a 4407 amount of excess of stress loss over DFW, day 2 n/a 4408 amount of excess of stress loss over DFW, day 3 n/a 4408 amount of excess of stress loss over DFW, day 3 n/a 4409 amount of excess of stress loss over DFW, day 4 n/a



	4410	amount of excess of stress loss over DFW, day 5	n/a
	4411	amount of excess of stress loss over DFW, day 6	n/a
	4412	amount of excess of stress loss over DFW, day 7	n/a
	4413	amount of excess of stress loss over DFW, day 8	n/a
	4414	amount of excess of stress loss over DFW, day 9	n/a
	4415	amount of excess of stress loss over DFW, day 10	n/a
		d) what was the actual largest aggregate credit exposure (in excess of initial margin)	Mn. EURO
		to any single participants and their affiliates	[4]
	4416	j. maximum of daily values	n/a
	4417	ij. average over daily values	n/a
	4417		11/ 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 extreme but plausible market	previous 12 months
		conditions?	Mn. EURO
	4418	i. maximum of daily values	659.3
	4419	ii. average over daily values	438.3
	4420	iii. number of days where stress loss exeeded DFW	0
	4421	iv. amount of excess of stress loss over DFW, day 1	n/a
	4422	amount of excess of stress loss over DFW, day 2	n/a
	4423	amount of excess of stress loss over DFW, day 3	n/a
	4424	amount of excess of stress loss over DFW, day 4	n/a
	4425	amount of excess of stress loss over DFW, day 5	n/a
	4426	amount of excess of stress loss over DFW, day 6	n/a
	4427	amount of excess of stress loss over DFW, day 7	n/a
	4428	amount of excess of stress loss over DFW, day 8	n/a
	4429	amount of excess of stress loss over DFW, day 9	n/a
	4430	amount of excess 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
			11, 0
5.	5000	Collateral (Principle 5)	.,,,
5. 5.1	5000 5101	Collateral (Principle 5) Assets eligible as initial margin, and the respective haircuts applied	.,,,
			<u> </u>
		Assets eligible as initial margin, and the respective haircuts applied	<u> </u>
5.1	5101	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate	<u> </u>
5.1	5101	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and	eral-management/overview
5.1	5101	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied	eral-management/overview
5.1	5101	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting	eral-management/overview eral-management/overview previous 12 months
5.1	5101 5201 5301	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts	eral-management/overview eral-management/overview
5.1	5101 5201 5301 5302	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3
5.1	5101 5201 5301 5302 5303	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3 255
5.1	5101 5201 5301 5302	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3
5.1 5.2 5.3	5101 5201 5301 5302 5303 5304	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3 255
5.1 5.2 5.3	5101 5201 5301 5302 5303 5304 6000	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3 255
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6)	eral-management/overview eral-management/overview previous 12 months 99,9 3 255 0
5.1 5.2 5.3	5101 5201 5301 5302 5303 5304 6000	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i>	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation	eral-management/overview eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i>	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House b) non-segregated	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House b) non-segregated	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House b) non-segregated c) segregated clients [5] Initial Margin Requirement for indirect participants: gross or net?	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross
5.1 5.2 5.3 6. Initial	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 Compared to the series of the
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House b) non-segregated c) segregated clients [5] Initial Margin Requirement for indirect participants: gross or net? Initial margin received by type of segregation a) House Cash total Cash deposited at a central bank of issue of the currency	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104 6201 6202 6203	Assets eligible as initial margin, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Assets eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied http://www.ecc.de/ecc-en/risk-management/collate Collateral Backtesting i. confidence interval targeted for haircuts ii. assumed holding/liquidation period for the assets iii. look-back period iv. number of days during look-back where fall in value exceeded haircuts Margin (Principle 6) Initial Margin Requirement by type of segregation a) House b) non-segregated c) segregated clients [5] Initial Margin Requirement for indirect participants: gross or net? Initial margin received by type of segregation a) House Cash total Cash deposited at a central bank of issue of the currency Cash deposited at other central banks	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2] [2]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104 6201 6202 6203 6204	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2] [2] [2] [2]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104 6201 6202 6203	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2] [2]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104 6201 6202 6203 6204 6205	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2] [2] [2] [2] [2]
5.1 5.2 5.3 6. <i>Initial</i> 6.1	5101 5201 5301 5302 5303 5304 6000 <i>Margin</i> 6101 6102 6103 6104 6201 6202 6203 6204	Assets eligible as initial margin, and the respective haircuts applied	eral-management/overview previous 12 months 99,9 3 255 0 As at quarter end Mn. EURO 1,287.5 0.0 6,671.9 Gross As at quarter end Mn. EURO [6] 1,811.1 [2] [2] [2] [2]

6.3

6.4



6207	Sovereign Government Bonds - foreign	0.0
6208	Agency	0.0
6209	Supranational Agency	0.0
6210	State / Provincial / Municipal - domestic	15.5
6211	State / Provincial / Municipal - foreign	0.0
6212	other Bonds	5.1
	Bonds (collateral value - post haircuts)	
6213	Sovereign Government Bonds - domestic	1.3
6214	Sovereign Government Bonds - foreign	0.0
6215	Agency	0.0
6216	Supranational Agency	0.0
6217	State / Provincial / Municipal - domestic	14.4
6218	State / Provincial / Municipal - foreign	0.0
6219	other Bonds	4.6
	b) non-segregated	
C220	Cash	0.0
6220 6221	total Cash	0.0
6222	deposited at a central bank of issue of the currency 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]
0224	Bonds (market value - w/o haircuts)	[2]
6225	Sovereign Government Bonds - domestic	0.0
6226	Sovereign Government Bonds - foreign	0.0
6227	Agency	0.0
6228	Supranational Agency	0.0
6229	State / Provincial / Municipal - domestic	0.0
6230	State / Provincial / Municipal -foreign	0.0
6231	other Bonds	0.0
	Bonds (collateral value - post haircuts)	0.0
6232	Sovereign Government Bonds - domestic	0.0
6233	Sovereign Government Bonds - foreign	0.0
6234	Agency	0.0
6235	Supranational Agency	0.0
6236	State / Provincial / Municipal - domestic	0.0
6237	State / Provincial / Municipal - foreign	0.0
6238	other Bonds	0.0
	c) segregated clients [5]	
	Cash	[6]
6239	total Cash	5,740.4
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]
6244	Bonds (market value - w/o haircuts) Sovereign Government Bonds - domestic	79.6
6245	Sovereign Government Bonds - domestic	30.1
6246	Agency	11.2
6247	Supranational Agency	0.0
6248	State / Provincial / Municipal - domestic	5.5
6249	State / Provincial / Municipal - foreign	0.0
6250	other Bonds	9.1
	Bonds (collateral value - post haircuts)	0.0
6251	Sovereign Government Bonds - domestic	76.8
6252	Sovereign Government Bonds - foreign	23.5
6253	Agency	10.6
6254	Supranational Agency	0.0
6255	State / Provincial / Municipal - domestic	5.4
6256	State / Provincial / Municipal - foreign	0.0
6257	other Bonds	7.9
6301	Initial margin rates on individual contracts, where the CCP sets such rates	[7]
3301		
I	Type of initial margin model used and key model design parameters	I



CPIVII	-10500	Disclosure for Central Counterparties	
	6401	Single Tail Confidence Level	99,0
	6402	Look Back Period	1 Year (250 Trading Days)
	6403	Weighting on historical data	Exponential Weighting
	0-03	Weighting on historical autu	with Lambda = 0.99
	6404	Close Out Periods	2 days
	6405	Rates and Credits	2 days
	0403	http://www.ecc.de/ecc-en/risk-man	agement/reports and files
	6406	Update Frequency	Daily
	0400	Opuate Hequency	Daily
6.5		Desults of back tacting of initial margin (daily back)	prov. 12 months
6.5		Results of back-testing of initial margin (daily basis)	prev. 12 months
		Reported are the aggregate results counting outliers of IM calculation at the level of	
	65.04	each Non-Clearing Member at ECC.	4.4
	6501	a) Number of days where IM fell below mark-to-market	14
	6502	b) Number of observations where IM fell below mark-to-market	92
	6503	c) Achieved coverage level	99.9%
	6504	d) Specify if measured intraday/continuously or only once a day.	continuously
	6505	e) If once a day, specify at what time of day.	n/a
		f)	Mn. EURO
	6506	i. breaches of initial margin: peak uncovered exposure	40.6
	6507	ii. breaches of initial margin: average uncovered exposure [8]	2.4
Marg	in Calls	•	
6.6		Avera	age over quarter; Mn. EURO
	6601	Average total variation margin paid to the CCP by participants each business day.	167.8
6.7		Maxim	um over quarter; Mn. EURO
•	6701	Maximum total variation margin paid to the CCP on any given business day over the	672.4
	0,01	period.	072.4
6.0		l'	Lucia de la compania del compania de la compania de la compania del compania de la compania del la compania del la compania de la compania del la compania del la compania de la compania del la
6.8			um over quarter; Mn. EURO
	6801	Maximum aggregate initial margin call on any given business day over the period.	305.7
7. 7.1		Liquidity Risk (Principle 7)	
7.1	7101	State whether the clearing service maintains sufficient liquid resources to 'Cover 1'	Cover 2
		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	8,206.8
	7109	ii. GBP	0.0
	7128	iii. JPY	0.0
	7135	iv. NOK	0.0
	7116	v. USD	0.0
	/110		
	74.00	b) Cash deposited at other central banks	As at quarter end
	7103	i. EUR	0.0
	7110	ii. GBP	0.0
	7129	iii. JPY	0.0
	7136	iv. NOK	0.0
	7117	v. USD	0.0
		c) Secured cash deposited at commercial banks (including reverse repo)	As at quarter end
	7104	i. EUR	0.0
	7111	ii. GBP	0.0
	7130	iii. JPY	0.0
	7137	iv. NOK	0.0
	7118	v. USD	0.0
		d) Unsecured cash deposited at commercial banks	
	7105	i. EUR	4.7
	7112	ii. GBP	39.6
	7131	iii. JPY	0.0
	7131	iv. NOK	2.0
	7138	v. USD	
			0.6
	7142	vi. PLN	0.0
		e) secured committed lines of credit including committed foreign exchange swaps	As at quarter end
	7	and committed repos	<u> </u>
	7106	i. EUR	0.0



C		risclosure for central counterparties	
	7113	ii. GBP	0.0
	7132	iii. JPY	0.0
	7139	iv. NOK	0.0
	7120	v. USD	0.0
		f) unsecured committed lines of credit which the CCP may draw without providing	As at quarter end
		collateral/security	
	7107	i. EUR	90.0
	7114	ii. GBP	0.0
	7133	iii. JPY	0.0
	7140 7121	iv. NOK v. USD	0.0
	/121	g) highly marketable collateral held in custody and investments that are readily	0.0 As at quarter end
		available and convertible into cash with prearranged and highly reliable funding	As at quarter end
		arrangements even in extreme but plausible market conditions	
		arrangements even in extreme but plausible market conditions	[9]
	7108	i. EUR	65.8
	7115	ii. GBP	0.0
	7134	iii. JPY	0.0
	7141	iv. NOK	0.0
	7122	v. USD	0.0
		h) other	
		i. EUR	0.0
		ii. GBP	0.0
		iii. JPY	0.0
		iv. NOK	0.0
		v. USD	0.0
		i) State whether the CCP has routine access to central bank liquidity or facilities.	As at quarter end
	7123	i. EUR	Yes - Intraday facility
	7124	ii. GBP	No
	7126	iii. JPY	No
	7127	iv. NOK	No
	7125	v. 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 market conditions?	previous quarter
	7004		Mn. EURO
	7301	i. maximum estimated amount	2,266.3
	7302	ii. number of days where estimated payment exceeded liquidity	0
	7303	iii. amount of excess on each day: amount of exess of payment over liq., day 1	n/a
	7303	amount of exess of payment over liq., day 1 amount of exess of payment over liq., day 2	n/a
	7304	amount of exess of payment over liq., day 3	n/a
	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	amount of exess of payment over liq., day 6	n/a
	7309	amount of exess of payment over lig., day 7	n/a
	7310	amount of exess of payment over lig., day 8	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
	7313	iv. actual largest payment obligation to a single participant over the past 12	n/a
		months	
12.		Exchange of Value Settlement Systems (Principle 12)	
12.1	12101	Percentage of settlements by value effected using a DvP, DvD or PvP settlement	n/a
12.2	12201	Descented of cattlements by values offerted using a DVD DVD or DVD cattlement	n /a
12.2	12201	Percentage of settlements by volume effected using a DvP, DvD or PvP settlement	n/a
		mechanism	
13	1	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	93%
	14104	iv. SOS	< 5%
	14105	b) basis: OI long side i. HOUSE	< 5%
	14105	ii. ISA	< 5%
	14107	iii. LSOC/GOS	94%
	14107	iv. SOS	5%
	11100	333	370
15.	1	General Business Risk (Prinicple 15)	1
45.4	45404) (I) (I	Mn. EURO
15.1	15101	a) value of liquid net assets funded by equity (EMIR capital)	131.9
15.2	15102	b) six months of current operating expenses	29.2
15.2	15201	Financial disclosures	[10]
		a) total revenue	135.0
	15202 15203	b) total expenditure c) profits	80.8 54.2
	15203	d) total assets	7,866.1
	15204	e) total liabilities	7,866.1
		f) Explain if collateral posted by clearing participants is held on or off the CCP's	All Cash is held on the
	13200	balance sheet	balance sheet; No pledged
		balance sheet	balance sheet, No pleaged
15.3		Income breakdowns	Donas
20.0	15301	a) percentage of income from clearing fees	100%
	15302	b) percentage of income from reinvestment of assests provided by clearing	0%
		participants	
<u>16.</u>		Custody and Investment Risks (Principle 16)	As at quarter end
			Mn. EURO
16.1	16101	Total Cash received by the CCP from participants	8,084.9
_	16102	Total Cash received by the CCP from participants: Default Fund contributions	534.4
	16103	Total Cash received by the CCP from participants: Initial Margins	7,550.6
16.2		Investment of Cash: Deposits	
	16201	a) deposits at central banks of issue of the currency	100%
	16202	b) deposits at other central banks	
		b) deposits at other certifal banks	0%
	16203	c) secured deposits at commercial banks	
	16204	c) secured deposits at commercial banks d) unsecured deposits at commercial banks	0%
	16204 16205	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds	0% 0% 0%
	16204 16205 16206	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other	0% 0% 0% 0%
	16204 16205 16206 16207	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR	0% 0% 0% 0% 100%
	16204 16205 16206 16207 16208	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP	0% 0% 0% 0% 100%
	16204 16205 16206 16207 16208 16209	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD	0% 0% 0% 0% 100% 0%
	16204 16205 16206 16207 16208	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days)	0% 0% 0% 0% 100% 0%
	16204 16205 16206 16207 16208 16209 16210	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities	0% 0% 0% 0% 100% 0% < 1
	16204 16205 16206 16207 16208 16209 16210	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds	0% 0% 0% 0% 100% 0% <1
	16204 16205 16206 16207 16208 16209 16210	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds	0% 0% 0% 100% 0% 0% 100% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16211 16212 16213	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds	0% 0% 0% 100% 0% 0% 100% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16211 16213 16214	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds	0% 0% 0% 0% 100% 0% 0% <10% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments	0% 0% 0% 0% 100% 0% 0% <10% 0% <10% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency	0% 0% 0% 0% 100% 0% 0% <10% 0% <10% 0% 0% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency g) percentage split by currency	0% 0% 0% 0% 100% 0% <10% 0% <10% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217 16218	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency g) percentage split by currency h) percentage split by currency	0% 0% 0% 0% 100% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency g) percentage split by currency h) percentage split by currency i) weighted average maturity of these securities	0% 0% 0% 0% 100% 0% <10% 0% <1 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217 16218 16219	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency g) percentage split by currency h) percentage split by currency i) weighted average maturity of these securities Investment of Cash: Investment Risk	0% 0% 0% 100% 0% 100% <1 0% 0% <1 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
	16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217 16218	c) secured deposits at commercial banks d) unsecured deposits at commercial banks e) money market funds f) other g) Cash - EUR h) Cash - GBP i) Cash - USD j) weighted average maturity of deposits and funds (days) Investment of Cash: Securities a) domestic sovereign government bonds b) foreign sovereign government bonds c) agency bonds d) state/ provincial / municipal bonds e) other instruments f) percentage split by currency g) percentage split by currency h) percentage split by currency i) weighted average maturity of these securities	0% 0% 0% 0% 100% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%



16.3	16301	Investment of Cash: Rehypothetication of Cash	n/a
		(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	99%
17.2	17201	Achieved availability of the core systems, previous twelve months	>99%
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
	18101	a) DCM domestic	1
	18102	b) DCM foreign	3
	18103	c) GCM domestic	5
	18104	d) GCM foreign	21
	18105	e) DCP domestic	14
	18106	f) DCP foreign	44
18.2		Percentage of OI held by Top5 CM: daily average over quarter	
	18201	a) basis: long side	78%
	18202	b) basis: short side	78%
		Percentage of OI held by Top5 CM: peak EoD over quarter	
	18203	c) basis: long side	79%
	18204	d) basis: short side	79%
18.3		Percentage of IM posted by Top5 CMs	
	18301	a) peak EoD over quarter	71%
	18302	b) daily average over quarter	69%
18.4	18401	Percentage of Top5 CM contributions to CF	60%
19.		Tiered Participation Arrangements (Principle 19)	
19.1		Measures of concentration of client clearing	
	19101	a) Number of known clients	604
	19102	b) Number of CM clearing for clients	26
	19103	c) Client OI attributale to Top5 CM	80%
	19104	d) Client OI attributale to Top5 CM	80%

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 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.
- [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.
- [5] Under the term "Segreated Clients", ISA, OSA and SOS segregated accounts are comprised.
- [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 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
- [8] Days without uncovered exposure are not included in the calculation of the average value.
- [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 Clearing Members as collateral for their initial margin requirement.
- [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 investment counterparties with regard to types of investment as well as overall limits for the individual counterparty and the counterparties group. These limits are based on an internal risk assessment using different external data sources including external rating agencies. Information refers to group external investment counterparties.