Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Text with EEA relevance)

[X1PART THREE

CAPITAL REQUIREMENTS

TITLE II

CAPITAL REQUIREMENTS FOR CREDIT RISK

[X1CHAPTER 6

Counterparty credit risk

Section 1

Definitions

Article 271

Determination of the exposure value

1 An institution shall determine the exposure value of derivative instruments listed in Annex II in accordance with this Chapter.

2 An institution may determine the exposure value of repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions in accordance with this Chapter instead of making use of Chapter 4.

Article 272

Definitions

For the purposes of this Chapter and of Title VI of this Part, the following definitions shall apply:

General terms

(1) ‘counterparty credit risk’ or ‘CCR’ means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows;

Transaction types

(2) ‘long settlement transactions’ means transactions where a counterparty undertakes to deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities, or vice versa, at a

settlement or delivery date specified by contract that is later than the market standard for this particular type of transaction or five business days after the date on which the institution enters into the transaction, whichever is earlier;

(3) 'margin lending transactions' means transactions in which an institution extends credit in connection with the purchase, sale, carrying or trading of securities. Margin lending transactions do not include other loans that are secured by collateral in the form of securities;

Netting set, hedging sets, and related terms

(4) 'netting set' means a group of transactions between an institution and a single counterparty that is subject to a legally enforceable bilateral netting arrangement that is recognised under Section 7 and Chapter 4.

Each transaction that is not subject to a legally enforceable bilateral netting arrangement which is recognised under Section 7 shall be treated as its own netting set for the purposes of this Chapter.

Under the Internal Model Method set out in Section 6, all netting sets with a single counterparty may be treated as a single netting set if negative simulated market values of the individual netting sets are set to 0 in the estimation of expected exposure (hereinafter referred to as 'EE');

(5) 'risk position' means a risk number that is assigned to a transaction under the Standardised Method set out in Section5 following a predetermined algorithm;

(6) 'hedging set' means a group of risk positions arising from the transactions within a single netting set, where only the balance of those risk positions is used for determining the exposure value under the Standardised Method set out in Section 5;

(7) 'margin agreement' means an agreement or provisions of an agreement under which one counterparty must supply collateral to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level;

(8) 'margin threshold' means the largest amount of an exposure that remains outstanding before one party has the right to call for collateral;

(9) 'margin period of risk' means the time period from the most recent exchange of collateral covering a netting set of transactions with a defaulting counterparty until the transactions are closed out and the resulting market risk is re-hedged;

(10) 'effective maturity' under the Internal Model Method for a netting set with maturity greater than one year means the ratio of the sum of expected exposure over the life of the transactions in the netting set discounted at the risk-free rate of return, divided by the sum of expected exposure over one year in the netting set discounted at the risk-free rate.

This effective maturity may be adjusted to reflect rollover risk by replacing expected exposure with effective expected exposure for forecasting horizons under one year;

(11) 'cross-product netting' means the inclusion of transactions of different product categories within the same netting set pursuant to the cross-product netting rules set out in this Chapter;

(12) 'Current Market Value' (hereinafter referred to as 'CMV') for the purposes of Section 5 refers to the net market value of the portfolio of transactions within a netting set, where both positive and negative market values are used in computing the CMV;

Distributions

(13) 'distribution of market values' means the forecast of the probability distribution of net market values of transactions within a netting set for a future date (the forecasting horizon), given the realised market value of those transactions at the date of the forecast;

(14) 'distribution of exposures' means the forecast of the probability distribution of market values that is generated by setting forecast instances of negative net market values equal to zero;

(15) 'risk-neutral distribution' means a distribution of market values or exposures over a future time period where the distribution is calculated using market implied values such as implied volatilities;

(16) 'actual distribution' means a distribution of market values or exposures at a future time period where the distribution is calculated using historic or realised values such as volatilities calculated using past price or rate changes;

Exposure measures and adjustments

(17) 'current exposure' means the larger of zero and the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in insolvency or liquidation;

(18) 'peak exposure' means a high percentile of the distribution of exposures at particular future date before the maturity date of the longest transaction in the netting set;

(19) 'expected exposure' (hereinafter referred to as 'EE') means the average of the distribution of exposures at a particular future date before the longest maturity transaction in the netting set matures;

(20) 'effective expected exposure at a specific date' (hereinafter referred to as 'Effective EE') means the maximum expected exposure that occurs at that date or any prior date. Alternatively, it may be defined for a specific date as the greater of the expected exposure at that date or the effective expected exposure at any prior date;

(21) 'expected positive exposure' (hereinafter referred to as 'EPE') means the weighted average over time of expected exposures, where the weights are the proportion of the entire time period that an individual expected exposure represents.

When calculating the own funds requirement, institutions shall take the average over the first year or, if all the contracts within the netting set mature

within less than one year, over the time period until the contract with the longest maturity in the netting set has matured;

(22) 'effective expected positive exposure' (hereinafter referred to as 'Effective EPE') means the weighted average of effective expected exposure over the first year of a netting set or, if all the contracts within the netting set mature within less than one year, over the time period of the longest maturity contract in the netting set, where the weights are the proportion of the entire time period that an individual expected exposure represents;

CCR related risks

(23) 'rollover risk' means the amount by which EPE is understated when future transactions with a counterparty are expected to be conducted on an ongoing basis.

The additional exposure generated by those future transactions is not included in calculation of EPE;

(24) 'counterparty' for the purposes of Section 7 means any legal or natural person that enters into a netting agreement, and has the contractual capacity to do so;

(25) 'contractual cross product netting agreement' means a bilateral contractual agreement between an institution and a counterparty which creates a single legal obligation (based on netting of covered transactions) covering all bilateral master agreements and transactions belonging to different product categories that are included within the agreement;

For the purposes of this definition, 'different product categories' means:

(a) repurchase transactions, securities and commodities lending and borrowing transactions;

(b) margin lending transactions;

(c) the contracts listed in Annex II;

(26) 'payment leg' means the payment agreed in an OTC derivative transaction with a linear risk profile which stipulates the exchange of a financial instrument for a payment.

In the case of transactions that stipulate the exchange of payment against payment, those two payment legs shall consist of the contractually agreed gross payments, including the notional amount of the transaction.

Section 2

Methods for calculating the exposure value

Article 273

Methods for calculating the exposure value

1 Institutions shall determine the exposure value for the contracts listed in Annex II on the basis of one of the methods set out in Sections 3 to 6 in accordance with this Article.

An institution which is not eligible for the treatment set out in Article 94 shall not use the method set out in Section 4. To determine the exposure value for the contracts listed in point 3 of Annex II an institution shall not use the method set out in Section 4. Institutions may use in combination the methods set out in Sections 3 to 6 on a permanent basis within a group. A single institution shall not use in combination the methods set out in Sections 3 to 6 on a permanent basis but shall be permitted to use in combination methods set out in Sections 3 and 5 when one of the methods is used for the cases set out in Article 282(6).

2 Where permitted by the competent authorities in accordance with Article 283(1) and (2), an institution may determine the exposure value for the following items using the Internal Model Method set out in Section 6:

a the contracts listed in Annex II;

b repurchase transactions;

c securities or commodities lending or borrowing transactions;

d margin lending transactions;

e long settlement transactions.

3 When an institution purchases protection through a credit derivative against a non-trading book exposure or against a counterparty risk exposure, it may calculate its own funds requirement for the hedged exposure in accordance with either of the following:

a Articles 233 to 236;

b in accordance with Article 153(3), or Article 183, where permission has been granted in accordance with Article 143.

The exposure value for CCR for those credit derivatives shall be zero, unless an institution applies the approach in point (h)(ii) of Article 299(2).

4 Notwithstanding paragraph 3, an institution may choose consistently to include for the purposes of calculating own funds requirements for counterparty credit risk all credit derivatives not included in the trading book and purchased as protection against a non-trading book exposure or against a counterparty credit risk exposure where the credit protection is recognised under this Regulation.

5 Where credit default swaps sold by an institution are treated by an institution as credit protection provided by that institution and are subject to own funds requirement for credit risk of the underlying for the full notional amount, their exposure value for the purposes of CCR in the non-trading book shall be zero.

6 Under all methods set out in Sections 3 to 6, the exposure value for a given counterparty shall be equal to the sum of the exposure values calculated for each netting set with that counterparty.

For a given counterparty, the exposure value for a given netting set of OTC derivative instruments listed in Annex II calculated in accordance with this Chapter shall be the greater of zero and the difference between the sum of exposure values across all netting sets with the counterparty and the sum of CVA for that counterparty being recognised by the institution as an incurred write-down. The credit valuation adjustments shall be calculated without taking into account any offsetting debit value adjustment attributed to the own credit risk of the firm that has been already excluded from own funds under Article 33(1)(c).

7 Institutions shall determine the exposure value for exposures arising from long settlement transactions by any of the methods set out in Sections 3 to 6, regardless of which

method the institution has chosen for treating OTC derivatives and repurchase transactions, securities or commodities lending or borrowing transactions, and margin lending transactions. In calculating the own funds requirements for long settlement transactions, an institution that uses the approach set out in Chapter 3 may assign the risk weights under the approach set out in Chapter 2 on a permanent basis and irrespective of the materiality of such positions.

8 For the methods set out in Sections 3 and 4, the institution shall adopt a consistent methodology for determining the notional amount for different product types, and shall ensure that the notional amount to be taken into account provides an appropriate measure of the risk inherent in the contract. Where the contract provides for a multiplication of cash flows, the notional amount shall be adjusted by an institution to take into account the effects of the multiplication on the risk structure of that contract.

For the methods set out in Sections 3 to 6, institutions shall treat transactions where specific wrong way risk has been identified in accordance with Article 291(2), (4), (5) and (6) as appropriate.

Section 3

Mark-to-Market Method

Article 274

Mark-to-Market Method

1 In order to determine the current replacement cost of all contracts with positive values, institutions shall attach the current market values to the contracts.

2 In order to determine the potential future credit exposure, institutions shall multiply the notional amounts or underlying values, as applicable, by the percentages in Table 1 and in accordance with the following principles:

(a) contracts which do not fall within one of the five categories indicated in Table 1 shall be treated as contracts concerning commodities other than precious metals;

(b) for contracts with multiple exchanges of principal, the percentages shall be multiplied by the number of remaining payments still to be made in accordance with the contract;

(c) for contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset so that the market value of the contract is zero on those specified dates, the residual maturity shall be equal to the time until the next reset date. In the case of interest-rate contracts that meet those criteria and have a remaining maturity of over one year, the percentage shall be no lower than 0,5 %.

TABLE 1

Residual maturity	Interest-rate contracts	Contracts concerning foreign-exchange rates and gold	Contracts concerning equities	Contracts concerning precious metals except gold	Contracts concerning commodities other than precious metals

One year or less	0 %	1 %	6 %	7 %	10 %
Over one year, not exceeding five years	0,5 %	5 %	8 %	7 %	12 %
Over five years	1,5 %	7,5 %	10 %	8 %	15 %

3 For contracts relating to commodities other than gold, which are referred to in point 3 of Annex II, an institution may, as an alternative to applying the percentages in Table 1, apply the percentages in Table 2 provided that that institution follows the extended maturity ladder approach set out in Article 361 for those contracts.

TABLE 2

Residual maturity	**Precious metals (except gold)**	**Base metals**	**Agricultural products (softs)**	**Other, including energy products**
One year or less	2 %	2,5 %	3 %	4 %
Over one year, not exceeding five years	5 %	4 %	5 %	6 %
Over five years	7,5 %	8 %	9 %	10 %

4 The sum of current replacement cost and potential future credit exposure is the exposure value.

Section 4

Original Exposure Method

Article 275

Original Exposure Method

1 The exposure value is the notional amount of each instrument multiplied by the percentages set out in Table 3.

TABLE 3

Original maturity	**Interest-rate contracts**	**Contracts concerning foreign-exchange rates and gold**
One year or less	0,5 %	2 %
Over one year, not exceeding two years	1 %	5 %

Additional allowance for each additional year	1 %	3 %

2 For calculating the exposure value of interest-rate contracts, an institution may choose to use either the original or residual maturity.

Section 5

Standardised Method

Article 276

Standardised Method

1 Institutions may use the Standardised Method (hereinafter referred to as 'SM') only for calculating the exposure value for OTC derivatives and long settlement transactions.

2 When applying the SM, institutions shall calculate the exposure value separately for each netting set, net of collateral, as follows:

$$\text{Exposure value} = \beta \times \max\left\{\text{CMV} - \text{CMC}, \sum_j \left|\sum_i \text{RPT}_{ij} - \sum_l \text{RPC}_{lj}\right| \times \text{CCRM}_j\right\}$$

where:

CMV = current market value of the portfolio of transactions within the netting set with a counterparty gross of collateral, where:

$$\text{CMV} = \sum_i \text{CMV}_i$$

where:

CMV_i = the current market value of transaction *i*;

CMC = the current market value of the collateral assigned to the netting set, where:

$$\text{CMC} = \sum_l \text{CMC}_l$$

where:

CMC_l = the current market value of collateral l;

i = index designating transaction;

l = index designating collateral;

j = index designating hedging set category;

The hedging sets for this purpose correspond to risk factors for which risk positions of opposite sign can be offset to yield a net risk position on which the exposure measure is then based.

RPT_{ij} = risk position from transaction i with respect to hedging set j;

RPC_{lj} = risk position from collateral l with respect to hedging set j;

CCRM_j = CCR Multiplier set out in Table 5 with respect to hedging set j;

β = 1,4.

3 For the purposes of the calculation under paragraph 2:

a eligible collateral received from a counterparty shall have a positive sign and collateral posted to a counterparty shall have a negative sign;

b only collateral that is eligible under Article 197, Article 198 and Article 299(2)(d) shall be used for the SM;

c an institution may disregard the interest rate risk from payment legs with a remaining maturity of less than one year;

d an institution may treat transactions that consist of two payment legs that are denominated in the same currency as a single aggregate transaction. The treatment for payment legs applies to the aggregate transaction.

Article 277

Transactions with a linear risk profile

1 Institutions shall map transactions with a linear risk profile to risk positions in accordance with the following provisions:

a transactions with a linear risk profile with equities (including equity indices), gold, other precious metals or other commodities as the underlying shall be mapped to a risk position in the respective equity (or equity index) or commodity and an interest rate risk position for the payment leg;

b transactions with a linear risk profile with a debt instrument as the underlying instrument shall be mapped to an interest rate risk position for the debt instrument and another interest rate risk position for the payment leg;

c transactions with a linear risk profile that stipulate the exchange of payment against payment, including foreign exchange forwards, shall be mapped to an interest rate risk position for each of the payment legs.

Where, under a transaction mentioned in point (a), (b) or (c), a payment leg or the underlying debt instrument is denominated in foreign currency, that payment leg or underlying instrument shall also be mapped to a risk position in that currency.

2 For the purposes of paragraph 1, the size of a risk position from a transaction with linear risk profile shall be the effective notional value (market price multiplied by quantity) of the underlying financial instruments or commodities converted to the institution's domestic currency by multiplication with the relevant exchange rate, except for debt instruments.

3 For debt instruments and for payment legs, the size of the risk position shall be the effective notional value of the outstanding gross payments (including the notional amount) converted to the currency of the home Member State, multiplied by the modified duration of the debt instrument or payment leg, as the case may be.

4 The size of a risk position from a credit default swap shall be the notional value of the reference debt instrument multiplied by the remaining maturity of the credit default swap.

[[F1]5 EBA shall develop draft regulatory technical standards to specify:

a the method for identifying transactions with only one material risk driver;

b the method for identifying transactions with more than one material risk driver and for identifying the most material of those risk drivers for the purposes of paragraph 3.

EBA shall submit those draft regulatory technical standards to the Commission by 28 December 2019.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1093/2010.**]**

Textual Amendments

F1 Inserted by Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 (Text with EEA relevance).

Article 278

Transactions with a non-linear risk profile

1 Institutions shall determine the size of the risk positions for transactions with a non-linear risk profile in accordance with the following paragraphs.

2 The size of a risk position from an OTC derivative with a non-linear risk profile, including options and swaptions, of which the underlying is not a debt instrument or a payment leg shall be equal to the delta equivalent effective notional value of the financial instrument that underlies the transaction in accordance with Article 280(1).

3 The size of a risk position from an OTC derivative with a non-linear risk profile, including options and swaptions, of which the underlying is a debt instrument or a payment leg, shall be equal to the delta equivalent effective notional value of the financial instrument or payment leg multiplied by the modified duration of the debt instrument or payment leg, as the case may be.

Article 279

Treatment of collateral

For the determination of risk positions, institutions shall treat collateral as follows:

(a) collateral received from a counterparty shall be treated as an obligation to the counterparty under a derivative contract (short position) that is due on the day the determination is made;

(b) collateral posted with the counterparty shall be treated as a claim on the counterparty (long position) that is due on the day the determination is made.

[F1*Article 279a*

Supervisory delta

3 EBA shall develop draft regulatory technical standards to specify:

a in accordance with international regulatory developments, the formula that institutions shall use to calculate the supervisory delta of call and put options mapped to the interest rate risk category compatible with market conditions in which interest rates may be negative as well as the supervisory volatility that is suitable for that formula;

b the method for determining whether a transaction is a long or short position in the primary risk driver or in the most material risk driver in the given risk category for transactions referred to in Article 277(3).

EBA shall submit those draft regulatory technical standards to the Commission by 28 December 2019.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1093/2010.**]**

Textual Amendments

F1 Inserted by Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 (Text with EEA relevance).

Article 280

Calculation of risk positions

1 An institution shall determine the size and sign of a risk position as follows:

a for all instruments other than debt instruments:

(i) as the effective notional value in the case of a transaction with a linear risk profile;

(ii) as the delta equivalent notional value,

$$p_{ref} \times \frac{\partial V}{\partial p}$$

, in the case of a transaction with a non-linear risk profile,

where:

P_{ref}	=	price of the underlying instrument, expressed in the reference currency;
V	=	value of the financial instrument (in the case of an option, the value is the option price);
p	=	price of the underlying instrument, expressed in the same currency as V;

b for debt instruments and the payment legs of all transactions:

(i) as the effective notional value multiplied by the modified duration in the case of a transaction with a linear risk profile;

(ii) as the delta equivalent in notional value multiplied by the modified duration,

, in the case of a transaction with a non-linear risk profile,

where:

V	=	value of the financial instrument (in the case of an option this is the option price);
r	=	interest rate level.

If V is denominated in a currency other than the reference currency, the derivative shall be converted into the reference currency by multiplication with the relevant exchange rate.

2 Institutions shall group the risk positions into hedging sets. The absolute value amount of the sum of the resulting risk positions shall be calculated for each hedging set. The net risk position shall be the result of that calculation and shall be calculated for the purposes of Article 276(2) as follows:

$$|\sum_i \mathrm{RPT}_{ij} - \sum_i \mathrm{RPC}_{ij}|$$

Article 281

Interest rate risk positions

1 In order to calculate interest rate risk position, institutions shall apply the following provisions.

2 For interest rate risk positions from the following:

(a) money deposits received from the counterparty as collateral;

(b) a payment legs;

(c) underlying debt instruments,

to which in each case a capital charge of 1,60 % or less applies in accordance with Table 1 of Article 336, institutions shall assign those positions to one of the six hedging sets for each currency set out in Table 4.

TABLE 4

	Government referenced interest rates	**Non-government referenced interest rates**
Maturity	< 1 year	< 1 year
	>1 ≤ 5 years	> 5 years
	>1 ≤ 5 years	> 5 years

3 For interest rate risk positions from underlying debt instruments or payment legs for which the interest rate is linked to a reference interest rate that represents a general market interest level, the remaining maturity shall be the length of the time interval up to the next re-adjustment of the interest rate. In all other cases, it shall be the remaining life of the underlying debt instrument or, in the case of a payment leg, the remaining life of the transaction.

Article 282

Hedging sets

1 Institutions shall establish hedging sets in accordance with paragraphs 2 to 5.

2 There shall be one hedging set for each issuer of a reference debt instrument that underlies a credit default swap.

N-th to default basket credit default swaps shall be treated as follows:

a the size of a risk position in a reference debt instrument in a basket underlying an n-th to default credit default swap shall be the effective notional value of the reference debt instrument, multiplied by the modified duration of the n-th to default derivative with respect to a change in the credit spread of the reference debt instrument;

b there shall be one hedging set for each reference debt instrument in a basket underlying a given 'nth to default' credit default swap. Risk positions from different n-th to default credit default swaps shall not be included in the same hedging set;

c the CCR multiplier applicable to each hedging set created for one of the reference debt instruments of an n-th to default derivative shall be as follows:

(i) 0,3 % for reference debt instruments that have a credit assessment from a recognised ECAI equivalent to credit quality step 1 to 3;

(ii) 0,6 % for other debt instruments.

3 For interest rate risk positions from:

a money deposits that are posted with a counterparty as collateral when that counterparty does not have debt obligations of low specific risk outstanding;

b underlying debt instruments, to which according to Table 1 of Article 336 a capital charge of more than 1,60 % applies.

There shall be one hedging set for each issuer.

When a payment leg emulates such a debt instrument, there shall also be one hedging set for each issuer of the reference debt instrument.

An institution may assign risk positions that arise from debt instruments of a particular issuer, or from reference debt instruments of the same issuer that are emulated by payment legs, or that underlie a credit default swap, to the same hedging set.

4 Underlying financial instruments other than debt instruments shall be assigned to the same hedging sets only if they are identical or similar instruments. In all other cases they shall be assigned to separate hedging sets.

For the purposes of this paragraph institutions shall determine whether underlying instruments are similar in accordance with the following principles:

a for equities, the underlying is similar if it is issued by the same issuer. An equity index shall be treated as a separate issuer;

b for precious metals, the underlying is similar if it is the same metal. A precious metal index shall be treated as a separate precious metal;

c for electric power, the underlying is similar if the delivery rights and obligations refer to the same peak or off-peak load time interval within any 24-hour interval;

d for commodities, the underlying is similar if it is the same commodity. A commodity index shall be treated as a separate commodity.

5 The CCR multipliers (hereinafter referred to as 'CCRM') for the different hedging set categories are set out in the following table:

TABLE 5

	Hedging set categories	**CCRM**
1.	Interest Rates	0,2 %
2.	Interest Rates for risk positions from a reference debt instrument that underlies a credit default swap and to which a capital charge of 1,60 %, or less, applies under Table 1 of Chapter 2 of Title IV.	0,3 %
3.	Interest Rates for risk positions from a debt instrument or reference debt instrument to which a capital charge of more than 1,60 % applies under Table 1 of Chapter 2 of Title IV.	0,6 %
4.	Exchange Rates	2,5 %
5.	Electric Power	4 %
6.	Gold	5 %
7.	Equity	7 %
8.	Precious Metals (other than gold)	8,5 %
9.	Other Commodities (excluding precious metals and electricity power)	10 %
10.	Underlying instruments of OTC derivatives that are not in any of the above categories	10 %

Underlying instruments of OTC derivatives, as referred to in point 10 of Table 5, shall be assigned to separate individual hedging sets for each category of underlying instrument.

6 For transactions with a non-linear risk profile or for payment legs and transactions with debt instruments as underlying for which the institution cannot determine the delta or the modified duration, as the case may be, with an instrument model that the competent authority has approved for the purposes of determining the own funds requirements for market risk, the competent authority shall either determine the size of the risk positions and the applicable CCRMjs conservatively, or require the institution to use the method set out in Section 3. Netting shall not be recognised (that is, the exposure value shall be determined as if there were a netting set that comprises just an individual transaction).

7 An institution shall have internal procedures to verify that, prior to including a transaction in a hedging set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Section 7.

8 An institution that makes use of collateral to mitigate its CCR shall have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in Chapter 4.

Section 6

Internal Model Method

Article 283

Permission to use the Internal Model Method

1 Provided that the competent authorities are satisfied that the requirement in paragraph 2 have been met by an institution, they shall permit that institution to use the Internal Model Method (IMM) to calculate the exposure value for any of the following transactions:

a transactions in Article 273(2)(a);

b transactions in Article 273(2)(b), (c) and (d);

c transactions in Article 273(2)(a) to (d),

Where an institution is permitted to use the IMM to calculate exposure value for any of the transactions mentioned in points (a) to (c) of the first subparagraph, it may also use the IMM for the transactions in Article 273(2)(e).

Notwithstanding the third subparagraph of Article 273(1), an institution may choose not to apply this method to exposures that are immaterial in size and risk. In such case, an institution shall apply one of the methods set out in Sections 3 to 5 to these exposures where the relevant requirements for each approach are met.

2 Competent authorities shall permit institutions to use IMM for the calculations referred to in paragraph 1 only if the institution has demonstrated that it complies with the requirements set out in this Section, and the competent authorities verified that the systems for the management of CCR maintained by the institution are sound and properly implemented.

3 The competent authorities may permit institutions for a limited period to implement the IMM sequentially across different transaction types. During this period of sequential implementation institutions may use the methods set out in Section 3 or Section 5 for transaction type for which they do not use the IMM.

4 For all OTC derivative transactions and for long settlement transactions for which an institution has not received permission under paragraph 1 to use the IMM, the institution shall use the methods set out in Section 3 or Section 5.

Those methods may be used in combination on a permanent basis within a group. Within an institution those methods may be used in combination only where one of the methods is used for the cases set out in Article 282(6)

5 An institution which is permitted in accordance with paragraph 1 to use the IMM shall not revert to the use of the methods set out in Section 3 or Section 5 unless it is permitted by the

competent authority to do so. Competent authorities shall give such permission if the institution demonstrates good cause.

6 If an institution ceases to comply with the requirements laid down in this Section, it shall notify the competent authority and do one of the following:

a present to the competent authority a plan for a timely return to compliance;

b demonstrate to the satisfaction of the competent authority that the effect of non-compliance is immaterial.

Article 284

Exposure value

1 Where an institution is permitted, in accordance with Article 283(1), to use the IMM to calculate the exposure value of some or all transactions mentioned in that paragraph, it shall measure the exposure value of those transactions at the level of the netting set.

The model used by the institution for that purpose shall:

a specify the forecasting distribution for changes in the market value of the netting set attributable to joint changes in relevant market variables, such as interest rates, foreign exchange rates;

b calculate the exposure value for the netting set at each of the future dates on the basis of the joint changes in the market variables.

2 In order for the model to capture the effects of margining, the model of the collateral value shall meet the quantitative, qualitative and data requirements for the IMM in accordance with this Section and the institution may include in its forecasting distributions for changes in the market value of the netting set only eligible financial collateral as referred to in Articles 197 and 198 and points (c) and (d) of Article 299(2).

3 The own funds requirement for counterparty credit risk with respect to the CCR exposures to which an institution applies the IMM, shall be the higher of the following:

a the own funds requirement for those exposures calculated on the basis of Effective EPE using current market data;

b the own funds requirement for those exposures calculated on the basis of Effective EPE using a single consistent stress calibration for all CCR exposures to which they apply the IMM.

4 Except for counterparties identified as having Specific Wrong-Way risk that fall within the scope of Article 291(4) and (5), institutions shall calculate the exposure value as the product of alpha (α) times Effective EPE, as follows:

$$\textit{Exposure value} = \alpha \cdot \textit{Effective EPE}$$

where:

α = 1.4, unless competent authorities require a higher α or permit institutions to use their own estimates in accordance with paragraph 9;

Effective EPE shall be calculated by estimating expected exposure (EEt) as the average exposure at future date t, where the average is taken across possible future values of relevant market risk factors.

The model shall estimate EE at a series of future dates t1, t2, t3, etc.

5 Effective EE shall be calculated recursively as:

$$\text{Effective EE}_{tk} = \max\{\text{Effective EE}_{tk-1}, \text{EE}_{tk}\}$$

where:

the current date is denoted as t_0;

Effective EE_{t0} equals current exposure.

6 Effective EPE is the average Effective EE during the first year of future exposure. If all contracts in the netting set mature within less than one year, EPE shall be the average of EE until all contracts in the netting set mature. Effective EPE shall be calculated as a weighted average of Effective EE:

[X2
$$Effective\ EPE = \frac{1}{\min\{1year,\ maturity\}} \times \sum_{k=1}^{\min\{1year,\ maturity\}} Effective\ EE_{t_k} \times \Delta t_k$$
]

where the weights

$$\Delta t_k = t_k - t_{k-1}$$

allow for the case when future exposure is calculated at dates that are not equally spaced over time.

7 Institutions shall calculate EE or peak exposure measures on the basis of a distribution of exposures that accounts for the possible non-normality of the distribution of exposures.

8 An institution may use a measure of the distribution calculated by the IMM that is more conservative than α multiplied by Effective EPE as calculated in accordance with the equation in paragraph 4 for every counterparty.

9 Notwithstanding paragraph 4, competent authorities may permit institutions to use their own estimates of alpha, where:

a alpha shall equal the ratio of internal capital from a full simulation of CCR exposure across counterparties (numerator) and internal capital based on EPE (denominator);

b in the denominator, EPE shall be used as if it were a fixed outstanding amount.

When estimated in accordance with this paragraph, alpha shall be no lower than 1,2.

10 For the purposes of an estimate of alpha under paragraph 9, an institution shall ensure that the numerator and denominator are calculated in a manner consistent with the modelling methodology, parameter specifications and portfolio composition. The approach used to estimate α shall be based on the institution's internal capital approach, be well documented and be subject to independent validation. In addition, an institution shall review its estimates of alpha on at least a quarterly basis, and more frequently when the composition of the portfolio varies over time. An institution shall also assess the model risk.

11 An institution shall demonstrate to the satisfaction of the competent authorities that its internal estimates of alpha capture in the numerator material sources of dependency of distribution of market values of transactions or of portfolios of transactions across counterparties. Internal estimates of alpha shall take account of the granularity of portfolios.

12 In supervising the use of estimates under paragraph 9, competent authorities shall have regard to the significant variation in estimates of alpha that arises from the potential for mis-specification in the models used for the numerator, especially where convexity is present.

13 Where appropriate, volatilities and correlations of market risk factors used in the joint modelling of market and credit risk shall be conditioned on the credit risk factor to reflect potential increases in volatility or correlation in an economic downturn.

Editorial Information

X2 Substituted by Corrigendum to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Official Journal of the European Union L 176 of 27 June 2013) (Corrected version in Official Journal of the European Union L 321 of 30 November 2013).

Article 285

Exposure value for netting sets subject to a margin agreement

1 If the netting set is subject to a margin agreement and daily mark-to-market valuation, the institution shall calculate Effective EPE as set out in this paragraph. If the model captures the effects of margining when estimating EE, the institution may, subject to the permission of the competent authority, use the model's EE measure directly in the equation in Article 284(5). Competent authorities shall grant such permission only if they verify that the model properly captures the effects of margining when estimating EE. An institution that has not received such permission shall use one of the following Effective EPE measures:

a Effective EPE, calculated without taking into account any collateral held or posted by way of margin plus any collateral that has been posted to the counterparty independent of the daily valuation and margining process or current exposure;

b Effective EPE, calculated as the potential increase in exposure over the margin period of risk, plus the larger of:

(i) the current exposure including all collateral currently held or posted, other than collateral called or in dispute;

(ii) the largest net exposure, including collateral under the margin agreement, that would not trigger a collateral call. This amount shall reflect all applicable thresholds, minimum transfer amounts, independent amounts and initial margins under the margin agreement.

For the purposes of point (b), institutions shall calculate the add-on as the expected positive change of the mark-to-market value of the transactions during the margin period of risk. Changes in the value of collateral shall be reflected using the Supervisory Volatility Adjustments Approach in accordance with Section 4 of Chapter 4 or the own estimates of volatility adjustments of the Financial Collateral Comprehensive Method, but no collateral payments shall be assumed during the margin period of risk. The margin period of risk is subject to the minimum periods set out in paragraphs 2 to 5.

2 For transactions subject to daily re-margining and mark-to-market valuation, the margin period of risk used for the purpose of modelling the exposure value with margin agreements shall not be less than:

a 5 business days for netting sets consisting only of repurchase transactions, securities or commodities lending or borrowing transactions and margin lending transactions;

b 10 business days for all other netting sets.

3 Points (a) and (b) of paragraph 2 shall be subject to the following exceptions:

a for all netting sets where the number of trades exceeds 5 000 at any point during a quarter, the margin period of risk for the following quarter shall not be less than 20 business days. This exception shall not apply to institutions' trade exposures;

b for netting sets containing one or more trades involving either illiquid collateral, or an OTC derivative that cannot be easily replaced, the margin period of risk shall not be less than 20 business days.

An institution shall determine whether collateral is illiquid or whether OTC derivatives cannot be easily replaced in the context of stressed market conditions, characterised by the absence of continuously active markets where a counterparty would, within two days or fewer, obtain multiple price quotations that would not move the market or represent a price reflecting a market discount (in the case of collateral) or premium (in the case of an OTC derivative).

An institution shall consider whether trades or securities it holds as collateral are concentrated in a particular counterparty and if that counterparty exited the market precipitously whether the institution would be able to replace those trades or securities.

4 If an institution has been involved in more than two margin call disputes on a particular netting set over the immediately preceding two quarters that have lasted longer than the applicable margin period of risk under paragraphs 2 and 3, the institution shall use a margin period of risk that is at least double the period specified in paragraphs 2 and 3 for that netting set for the subsequent two quarters.

5 For re-margining with a periodicity of N days, the margin period of risk shall be at least equal to the period specified in paragraphs 2 and 3, F, plus N days minus one day. That is:

$$\textit{Margin Period of Risk} = F + N - 1$$

6 If the internal model includes the effect of margining on changes in the market value of the netting set, an institution shall model collateral, other than cash of the same currency as the exposure itself, jointly with the exposure in its exposure value calculations for OTC derivatives and securities-financing transactions.

7 If an institution is not able to model collateral jointly with the exposure, it shall not recognise in its exposure value calculations for OTC derivatives and securities-financing transactions the effect of collateral other than cash of the same currency as the exposure itself, unless it uses either volatility adjustments that meet the standards of the financial collateral comprehensive Method with own volatility adjustments estimates or the standard Supervisory Volatility Adjustments Approach in accordance with Chapter 4.

8 An institution using the IMM shall ignore in its models the effect of a reduction of the exposure value due to any clause in a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates.

Article 286

Management of CCR — Policies, processes and systems

1 An institution shall establish and maintain a CCR management framework, consisting of:

a policies, processes and systems to ensure the identification, measurement, management, approval and internal reporting of CCR;

b procedures for ensuring that those policies, processes and systems are complied with.

Those policies, processes and systems shall be conceptually sound, implemented with integrity and documented. The documentation shall include an explanation of the empirical techniques used to measure CCR.

2 The CCR management framework required by paragraph 1 shall take account of market, liquidity, and legal and operational risks that are associated with CCR. In particular, the framework shall ensure that the institution complies with the following principles:

a it does not undertake business with a counterparty without assessing its creditworthiness;

b it takes due account of settlement and pre-settlement credit risk;

c it manages such risks as comprehensively as practicable at the counterparty level by aggregating CCR exposures with other credit exposures and at the firm-wide level.

3 An institution using the IMM shall ensure that its CCR management framework accounts to the satisfaction of the competent authority for the liquidity risks of all of the following:

a potential incoming margin calls in the context of exchanges of variation margin or other margin types, such as initial or independent margin, under adverse market shocks;

b potential incoming calls for the return of excess collateral posted by counterparties;

c calls resulting from a potential downgrade of its own external credit quality assessment.

An institution shall ensure that the nature and horizon of collateral re-use is consistent with its liquidity needs and does not jeopardise its ability to post or return collateral in a timely manner.

4 An institution's management body and senior management shall be actively involved in, and ensure that adequate resources are allocated to, the management of CCR. Senior management shall be aware of the limitations and assumptions of the model used and the impact those limitations and assumptions can have on the reliability of the output through a formal process. Senior management shall be also aware of the uncertainties of the market environment and operational issues and of how these are reflected in the model.

5 The daily reports prepared on an institution's exposures to CCR in accordance with Article 287(2)(b) shall be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the institution's overall CCR exposure.

6 An institution's CCR management framework established in accordance with paragraph 1 shall be used in conjunction with internal credit and trading limits. Credit and trading limits shall be related to the institution's risk measurement model in a manner that is consistent over time and that is well understood by credit managers, traders and senior management. An institution shall have a formal process to report breaches of risk limits to the appropriate level of management.

7 An institution's measurement of CCR shall include measuring daily and intra-day use of credit lines. The institution shall measure current exposure gross and net of collateral. At portfolio and counterparty level, the institution shall calculate and monitor peak exposure or potential future exposure at the confidence interval chosen by the institution. The institution shall take account of large or concentrated positions, including by groups of related counterparties, by industry and by market.

8 An institution shall establish and maintain a routine and rigorous program of stress testing. The results of that stress testing shall be reviewed regularly and at least quarterly by senior management and shall be reflected in the CCR policies and limits set by the management

body or senior management. Where stress tests reveal particular vulnerability to a given set of circumstances, the institution shall take prompt steps to manage those risks.

Article 287

Organisation structures for CCR management

1 An institution using the IMM shall establish and maintain:

a a risk control unit that complies with paragraph 2;

b a collateral management unit that complies with paragraph 3.

2 The risk control unit shall be responsible for the design and implementation of its CCR management, including the initial and on-going validation of the model, and shall carry out the following functions and meet the following requirements:

a it shall be responsible for the design and implementation of the CCR management system of the institution;

b it shall produce daily reports on and analyse the output of the institution's risk measurement model. That analysis shall include an evaluation of the relationship between measures of CCR exposure values and trading limits;

c it shall control input data integrity and produce and analyse reports on the output of the institution's risk measurement model, including an evaluation of the relationship between measures of risk exposure and credit and trading limits;

d it shall be independent from units responsible for originating, renewing or trading exposures and free from undue influence;

e it shall be adequately staffed;

f it shall report directly to the senior management of the institution;

g its work shall be closely integrated into the day-to-day credit risk management process of the institution;

h its output shall be an integral part of the process of planning, monitoring and controlling the institution's credit and overall risk profile.

3 The collateral management unit shall carry out the following tasks and functions:

a calculating and making margin calls, managing margin call disputes and reporting levels of independent amounts, initial margins and variation margins accurately on a daily basis;

b controlling the integrity of the data used to make margin calls, and ensuring that it is consistent and reconciled regularly with all relevant sources of data within the institution;

c tracking the extent of re-use of collateral and any amendment of the rights of the institution to or in connection with the collateral that it posts;

d reporting to the appropriate level of management the types of collateral assets that are reused, and the terms of such reuse including instrument, credit quality and maturity;

e tracking concentration to individual types of collateral assets accepted by the institution;

f reporting collateral management information on a regular basis, but at least quarterly, to senior management, including information on the type of collateral received and posted, the size, aging and cause for margin call disputes. That internal reporting shall also reflect trends in these figures.

4 Senior management shall allocate sufficient resources to the collateral management unit required under paragraph 1(b) to ensure that its systems achieve an appropriate level of operational performance, as measured by the timeliness and accuracy of margin calls by

the institution and the timeliness of the response of the institution to margin calls by its counterparties. Senior management shall ensure that the unit is adequately staffed to process calls and disputes in a timely manner even under severe market crisis, and to enable the institution to limit its number of large disputes caused by trade volumes.

Article 288

Review of CCR management system

An institution shall regularly conduct an independent review of its CCR management system through its internal auditing process. That review shall include both the activities of the control and collateral management units required by Article 287 and shall specifically address, as a minimum:

(a) the adequacy of the documentation of the CCR management system and process required by Article 286;

(b) the organisation of the CCR control unit required by Article 287(1)(a);

(c) the organisation of the collateral management unit required by Article 287(1)(b);

(d) the integration of CCR measures into daily risk management;

(e) the approval process for risk pricing models and valuation systems used by front and back-office personnel;

(f) the validation of any significant change in the CCR measurement process;

(g) the scope of CCR captured by the risk measurement model;

(h) the integrity of the management information system;

(i) the accuracy and completeness of CCR data;

(j) the accurate reflection of legal terms in collateral and netting agreements into exposure value measurements;

(k) the verification of the consistency, timeliness and reliability of data sources used to run models, including the independence of such data sources;

(l) the accuracy and appropriateness of volatility and correlation assumptions;

(m) the accuracy of valuation and risk transformation calculations;

(n) the verification of the model's accuracy through frequent back-testing as set out in points (b) to (e) of Article 293(1);

(o) the compliance of the CCR control unit and collateral management unit with the relevant regulatory requirements.

Article 289

Use test

1 Institutions shall ensure that the distribution of exposures generated by the model used to calculate Effective EPE is closely integrated into the day-to-day CCR management process

of the institution, and that the output of the model is taken into account in the process of credit approval, CCR management, internal capital allocation and corporate governance.

2 The institution shall demonstrate to the satisfaction of the competent authorities that it has been using a model to calculate the distribution of exposures upon which the EPE calculation is based that meets, broadly, the requirements set out in this Section for at least one year prior to permission to use the IMM by the competent authorities in accordance with Article 283.

3 The model used to generate a distribution of exposures to CCR shall be part of the CCR management framework required by Article 286. This framework shall include the measurement of usage of credit lines, aggregating CCR exposures with other credit exposures and internal capital allocation.

4 In addition to EPE, an institution shall measure and manage current exposures. Where appropriate, the institution shall measure current exposure gross and net of collateral. The use test is satisfied if an institution uses other CCR measures, such as peak exposure, based on the distribution of exposures generated by the same model to compute EPE.

5 An institution shall have the systems capability to estimate EE daily if necessary, unless it demonstrates to the satisfaction of its competent authorities that its exposures to CCR warrant less frequent calculation. The institution shall estimate EE along a time profile of forecasting horizons that adequately reflects the time structure of future cash flows and maturity of the contracts and in a manner that is consistent with the materiality and composition of the exposures.

6 Exposure shall be measured, monitored and controlled over the life of all contracts in the netting set and not only to the one-year horizon. The institution shall have procedures in place to identify and control the risks for counterparties where the exposure rises beyond the one-year horizon. The forecast increase in exposure shall be an input into the institution's internal capital model.

Article 290

Stress testing

1 An institution shall have a comprehensive stress testing programme for CCR, including for use in assessment of own funds requirements for CCR, which complies with the requirements laid down in paragraphs 2 to 10.

2 It shall identify possible events or future changes in economic conditions that could have unfavourable effects on an institution's credit exposures and assess the institution's ability to withstand such changes.

3 The stress measures under the programme shall be compared against risk limits and considered by the institution as part of the process set out in Article 81 of Directive 2013/36/EU.

4 The programme shall comprehensively capture trades and aggregate exposures across all forms of counterparty credit risk at the level of specific counterparties in a sufficient time frame to conduct regular stress testing.

5 It shall provide for at least monthly exposure stress testing of principal market risk factors such as interest rates, FX, equities, credit spreads, and commodity prices for all counterparties of the institution, in order to identify, and enable the institution when necessary to reduce outsized concentrations in specific directional risks. Exposure stress testing -including single factor, multifactor and material non-directional risks- and joint stressing of exposure

and creditworthiness shall be performed at the counterparty-specific, counterparty group and aggregate institution-wide CCR levels.

6 It shall apply at least quarterly multifactor stress testing scenarios and assess material non-directional risks including yield curve exposure and basis risks. Multiple-factor stress tests shall, at a minimum, address the following scenarios in which the following occurs:

a severe economic or market events have occurred;

b broad market liquidity has decreased significantly;

c a large financial intermediary is liquidating positions.

7 The severity of the shocks of the underlying risk factors shall be consistent with the purpose of the stress test. When evaluating solvency under stress, the shocks of the underlying risk factors shall be sufficiently severe to capture historical extreme market environments and extreme but plausible stressed market conditions. The stress tests shall evaluate the impact of such shocks on own funds, own funds requirements and earnings. For the purpose of day-to-day portfolio monitoring, hedging, and management of concentrations the testing programme shall also consider scenarios of lesser severity and higher probability.

8 The programme shall include provision, where appropriate, for reverse stress tests to identify extreme, but plausible, scenarios that could result in significant adverse outcomes. Reverse stress testing shall account for the impact of material non-linearity in the portfolio.

9 The results of the stress testing under the programme shall be reported regularly, at least on a quarterly basis, to senior management. The reports and analysis of the results shall cover the largest counterparty-level impacts across the portfolio, material concentrations within segments of the portfolio (within the same industry or region), and relevant portfolio and counterparty specific trends.

10 Senior management shall take a lead role in the integration of stress testing into the risk management framework and risk culture of the institution and ensure that the results are meaningful and used to manage CCR. The results of stress testing for significant exposures shall be assessed against guidelines that indicate the institution's risk appetite, and referred to senior management for discussion and action when excessive or concentrated risks are identified.

Article 291

Wrong-Way Risk

1 For the purposes of this Article:

a ‘General Wrong-Way risk’ arises when the likelihood of default by counterparties is positively correlated with general market risk factors;

b ‘Specific Wrong-Way risk’ arises when future exposure to a specific counterparty is positively correlated with the counterparty's PD due to the nature of the transactions with the counterparty. An institution shall be considered to be exposed to Specific Wrong-Way risk if the future exposure to a specific counterparty is expected to be high when the counterparty's probability of a default is also high.

2 An institution shall give due consideration to exposures that give rise to a significant degree of Specific and General Wrong-Way risk.

3 In order to identify General Wrong-Way risk, an institution shall design stress testing and scenario analyses to stress risk factors that are adversely related to counterparty creditworthiness. Such testing shall address the possibility of severe shocks occurring when relationships between risk factors have changed. An institution shall monitor General Wrong

Way risk by product, by region, by industry, or by other categories that are relevant to the business.

4 An institution shall maintain procedures to identify, monitor and control cases of Specific Wrong-Way risk for each legal entity, beginning at the inception of a transaction and continuing through the life of the transaction.

5 Institutions shall calculate the own funds requirements for CCR in relation to transactions where Specific Wrong-Way risk has been identified and where there exists a legal connection between the counterparty and the issuer of the underlying of the OTC derivative or the underlying of the transactions referred to in points (b), (c) and (d) of Article 273(2)), in accordance with the following principles:

a the instruments where Specific Wrong-Way risk exists shall not be included in the same netting set as other transactions with the counterparty, and shall each be treated as a separate netting set;

b within any such separate netting set, for single-name credit default swaps the exposure value equals the full expected loss in the value of the remaining fair value of the underlying instruments based on the assumption that the underlying issuer is in liquidation;

c LGD for an institution using the approach set out in Chapter 3 shall be 100 % for such swap transactions;

d for an institution using the approach set out in Chapter 2, the applicable risk weight shall be that of an unsecured transaction;

e for all other transactions referencing a single name in any such separate netting set, the calculation of the exposure value shall be consistent with the assumption of a jump-to-default of those underlying obligations where the issuer is legally connected with the counterparty. For transactions referencing a basket of names or index, the jump-to-default of the respective underlying obligations where the issuer is legally connected with the counterparty, shall be applied, if material;

f to the extent that this uses existing market risk calculations for own funds requirements for incremental default and migration risk as set out in Title IV, Chapter 5, Section 4 that already contain an LGD assumption, the LGD in the formula used shall be 100 %.

6 Institutions shall provide senior management and the appropriate committee of the management body with regular reports on both Specific and General Wrong-Way risks and the steps being taken to manage those risks.

Article 292

Integrity of the modelling process

1 An institution shall ensure the integrity of modelling process as set out in Article 284 by adopting at least the following measures:

a the model shall reflect transaction terms and specifications in a timely, complete, and conservative fashion;

b those terms shall include at least contract notional amounts, maturity, reference assets, margining arrangements and netting arrangements;

c those terms and specifications shall be maintained in a database that is subject to formal and periodic audit;

d a process for recognising netting arrangements that requires legal staff to verify that netting under those arrangements is legally enforceable;

e the verification required under point (d) shall be entered into the database mentioned in point (c) by an independent unit;

f the transmission of transaction terms and specification data to the EPE model shall be subject to internal audit;

g there shall be processes for formal reconciliation between the model and source data systems to verify on an ongoing basis that transaction terms and specifications are being reflected in EPE correctly or at least conservatively.

2 Current market data shall be used to determine current exposures. An institution may calibrate its EPE model using either historic market data or market implied data to establish parameters of the underlying stochastic processes, such as drift, volatility and correlation. If an institution uses historical data, it shall use at least three years of such data. The data shall be updated at least quarterly, and more frequently if necessary to reflect market conditions.

To calculate the Effective EPE using a stress calibration, an institution shall calibrate Effective EPE using either three years of data that includes a period of stress to the credit default spreads of its counterparties or market implied data from such a period of stress.

The requirements in paragraphs 3, 4 and 5 shall be applied by the institution for that purpose.

3 An institution shall demonstrate to the satisfaction of the competent authority, at least quarterly, that the stress period used for the calculation under this paragraph coincides with a period of increased credit default swap or other credit (such as loan or corporate bond) spreads for a representative selection of its counterparties with traded credit spreads. In situations where the institution does not have adequate credit spread data for a counterparty, it shall map that counterparty to specific credit spread data based on region, internal rating and business types.

4 The EPE model for all counterparties shall use data, either historic or implied, that include the data from the stressed credit period and shall use such data in a manner consistent with the method used for the calibration of the EPE model to current data.

5 To evaluate the effectiveness of its stress calibration for EEPE, an institution shall create several benchmark portfolios that are vulnerable to the main risk factors to which the institution is exposed. The exposure to these benchmark portfolios shall be calculated using (a) a stress methodology, based on current market values and model parameters calibrated to stressed market conditions, and (b) the exposure generated during the stress period, but applying the method set out in this Section (end of stress period market value, volatilities, and correlations from the 3-year stress period).

The competent authorities shall require an institution to adjust the stress calibration if the exposures of those benchmark portfolios deviate substantially from each other.

6 An institution shall subject the model to a validation process that is clearly articulated in the institutions' policies and procedures. That validation process shall:

a specify the kind of testing needed to ensure model integrity and identify conditions under which the assumptions underlying the model are inappropriate and may therefore result in an understatement of EPE;

b include a review of the comprehensiveness of the model.

7 An institution shall monitor the relevant risks and have processes in place to adjust its estimation of Effective EPE when those risks become significant. In complying with this paragraph, the institution shall:

a identify and manage its exposures to Specific Wrong-Way risk arising as specified in Article 291(1)(b) and exposures to General Wrong-Way risk arising as specified in Article 291(1)(a);

b for exposures with a rising risk profile after one year, compare on a regular basis the estimate of a relevant measure of exposure over one year with the same exposure measure over the life of the exposure;

c for exposures with a residual maturity below one year, compare on a regular basis the replacement cost (current exposure) and the realised exposure profile, and store data that would allow such a comparison.

8 An institution shall have internal procedures to verify that, prior to including a transaction in a netting set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Section 7.

9 An institution that uses collateral to mitigate its CCR shall have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in Chapter 4.

10 EBA shall monitor the range of practices in this area and shall, in accordance with Article 16 of Regulation (EU) No 1093/2010, issue guidelines on the application of this Article.

Article 293

Requirements for the risk management system

1 An institution shall comply with the following requirements:

a it shall meet the qualitative requirements set out in Part Three, Title IV, Chapter 5;

b it shall conduct a regular programme of back-testing, comparing the risk measures generated by the model with realised risk measures, and hypothetical changes based on static positions with realised measures;

c it shall carry out an initial validation and an on-going periodic review of its CCR exposure model and the risk measures generated by it. The validation and review shall be independent of the model development;

d the management body and senior management shall be involved in the risk control process and shall ensure that adequate resources are devoted to credit and counterparty credit risk control. In this regard, the daily reports prepared by the independent risk control unit established in accordance Article 287(1)(a) shall be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual traders and reductions in the overall risk exposure of the institution;

e the internal risk measurement exposure model shall be integrated into the day-to-day risk management process of the institution;

f the risk measurement system shall be used in conjunction with internal trading and exposure limits. In this regard, exposure limits shall be related to the institution's risk measurement model in a manner that is consistent over time and that is well understood by traders, the credit function and senior management;

g an institution shall ensure that its risk management system is well documented. In particular, it shall maintain a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system, and arrangements to ensure that those policies are complied with;

h an independent review of the risk measurement system shall be carried out regularly in the institution's own internal auditing process. This review shall include both the

activities of the business trading units and of the independent risk control unit. A review of the overall risk management process shall take place at regular intervals (and no less than once a year) and shall specifically address, as a minimum, all items referred to in Article 288;

i the on-going validation of counterparty credit risk models, including back-testing, shall be reviewed periodically by a level of management with sufficient authority to decide the action that will be taken to address weaknesses in the models.

2 Competent authorities shall take into account the extent to which an institution meets the requirements of paragraph 1 when setting the level of alpha, as set out in Article 284(4). Only those institutions that comply fully with those requirements shall be eligible for application of the minimum multiplication factor.

3 An institution shall document the process for initial and on-going validation of its CCR exposure model and the calculation of the risk measures generated by the models to a level of detail that would enable a third party to recreate, respectively, the analysis and the risk measures. That documentation shall set out the frequency with which back testing analysis and any other on-going validation will be conducted, how the validation is conducted with respect to data flows and portfolios and the analyses that are used.

4 An institution shall define criteria with which to assess its CCR exposure models and the models that input into the calculation of exposure and maintain a written policy that describes the process by which unacceptable performance will be identified and remedied.

5 An institution shall define how representative counterparty portfolios are constructed for the purposes of validating an CCR exposure model and its risk measures.

6 The validation of CCR exposure models and their risk measures that produce forecast distributions shall consider more than a single statistic of the forecast distribution.

Article 294

Validation requirements

1 As part of the initial and on-going validation of its CCR exposure model and its risk measures, an institution shall ensure that the following requirements are met:

a the institution shall carry out back-testing using historical data on movements in market risk factors prior to the permission by the competent authorities in accordance with Article 283(1). That back-testing shall consider a number of distinct prediction time horizons out to at least one year, over a range of various initialisation dates and covering a wide range of market conditions;

b the institution using the approach set out in Article 285(1)(b) shall regularly validate its model to test whether realised current exposures are consistent with prediction over all margin periods within one year. If some of the trades in the netting set have a maturity of less than one year, and the netting set has higher risk factor sensitivities without these trades, the validation shall take this into account;

c it shall back-test the performance of its CCR exposure model and the model's relevant risk measures as well as the market risk factor predictions. For collateralised trades, the prediction time horizons considered shall include those reflecting typical margin periods of risk applied in collateralised or margined trading;

d if the model validation indicates that Effective EPE is underestimated, the institution shall take the action necessary to address the inaccuracy of the model;

e it shall test the pricing models used to calculate CCR exposure for a given scenario of future shocks to market risk factors as part of the initial and on-going model validation process. Pricing models for options shall account for the nonlinearity of option value with respect to market risk factors;

f the CCR exposure model shall capture the transaction-specific information necessary to be able to aggregate exposures at the level of the netting set. An institution shall verify that transactions are assigned to the appropriate netting set within the model;

g the CCR exposure model shall include transaction-specific information to capture the effects of margining. It shall take into account both the current amount of margin and margin that would be passed between counterparties in the future. Such a model shall account for the nature of margin agreements that are unilateral or bilateral, the frequency of margin calls, the margin period of risk, the minimum threshold of un-margined exposure the institution is willing to accept, and the minimum transfer amount. Such a model shall either estimate the mark-to-market change in the value of collateral posted or apply the rules set out in Chapter 4;

h the model validation process shall include static, historical back-testing on representative counterparty portfolios. An institution shall conduct such back-testing on a number of representative counterparty portfolios that are actual or hypothetical at regular intervals. Those representative portfolios shall be chosen on the basis of their sensitivity to the material risk factors and combinations of risk factors to which the institution is exposed;

i an institution shall conduct back-testing that is designed to test the key assumptions of the CCR exposure model and the relevant risk measures, including the modelled relationship between tenors of the same risk factor, and the modelled relationships between risk factors;

j the performance of CCR exposure models and its risk measures shall be subject to appropriate back-testing practice. The back testing programme shall be capable of identifying poor performance in an EPE model's risk measures;

k an institution shall validate its CCR exposure models and all risk measures out to time horizons commensurate with the maturity of trades for which exposure is calculated using IMM in accordance to the Article 283;

l an institution shall regularly test the pricing models used to calculate counterparty exposure against appropriate independent benchmarks as part of the on-going model validation process;

m the on-going validation of an institution's CCR exposure model and the relevant risk measures shall include an assessment of the adequacy of the recent performance;

n the frequency with which the parameters of an CCR exposure model are updated shall be assessed by an institution as part of the initial and on-going validation process;

o the initial and on-going validation of CCR exposure models shall assess whether or not the counterparty level and netting set exposure calculations of exposure are appropriate.

2 A measure that is more conservative than the metric used to calculate regulatory exposure value for every counterparty may be used in place of alpha multiplied by Effective EPE with the prior permission of the competent authorities. The degree of relative conservatism will be assessed upon initial approval by the competent authorities and at the regular supervisory reviews of the EPE models. An institution shall validate the conservatism regularly. The on-going assessment of model performance shall cover all counterparties for which the models are used.

3 If back-testing indicates that a model is not sufficiently accurate, the competent authorities shall revoke its permission for the model, or impose appropriate measures to ensure that the model is improved promptly.

Section 7

Contractual netting

Article 295

Recognition of contractual netting as risk-reducing

Institutions may treat as risk reducing in accordance with Article 298 only the following types of contractual netting agreements where the netting agreement has been recognised by competent authorities in accordance with Article 296 and where the institution meets the requirements set out in Article 297:

(a) bilateral contracts for novation between an institution and its counterparty under which mutual claims and obligations are automatically amalgamated in such a way that the novation fixes one single net amount each time it applies so as to create a single new contract that replaces all former contracts and all obligations between parties pursuant to those contracts and is binding on the parties;

(b) other bilateral agreements between an institution and its counterparty;

(c) contractual cross-product netting agreements for institutions that have received the approval to use the method set out in Section 6 for transactions falling under the scope of that method. Competent authorities shall report to EBA a list of the contractual cross-product netting agreements approved.

Netting across transactions entered into by different legal entities of a group shall not be recognised for the purposes of calculating the own funds requirements.

Article 296

Recognition of contractual netting agreements

1 Competent authorities shall recognise a contractual netting agreement only where the conditions in paragraph 2 and, where relevant, 3 are fulfilled.

2 The following conditions shall be fulfilled by all contractual netting agreements used by an institution for the purposes of determining exposure value in this Part:

a the institution has concluded a contractual netting agreement with its counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of default by the counterparty it would be entitled to receive or obliged to pay only the net sum of the positive and negative mark-to-market values of included individual transactions;

b the institution has made available to the competent authorities written and reasoned legal opinions to the effect that, in the event of a legal challenge of the netting agreement, the institution's claims and obligations would not exceed those referred to in point (a). The legal opinion shall refer to the applicable law:

(i) the jurisdiction in which the counterparty is incorporated;

(ii) if a branch of an undertaking is involved, which is located in a country other than that where the undertaking is incorporated, the jurisdiction in which the branch is located;

(iii) the jurisdiction whose law governs the individual transactions included in the netting agreement;

(iv) the jurisdiction whose law governs any contract or agreement necessary to effect the contractual netting;

c credit risk to each counterparty is aggregated to arrive at a single legal exposure across transactions with each counterparty. This aggregation shall be factored into credit limit purposes and internal capital purposes;

d the contract shall not contain any clause which, in the event of default of a counterparty, permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulting party, even if the defaulting party is a net creditor (i.e. walk-away clause).

If any of the competent authorities are not satisfied that the contractual netting is legally valid and enforceable under the law of each of the jurisdictions referred to in point (b) the contractual netting agreement shall not be recognised as risk-reducing for either of the counterparties. Competent authorities shall inform each other accordingly.

3 The legal opinions referred to in point (b) may be drawn up by reference to types of contractual netting. The following additional conditions shall be fulfilled by contractual cross-product netting agreements:

a the net sum referred to in point (a) of paragraph 2 is the net sum of the positive and negative close out values of any included individual bilateral master agreement and of the positive and negative mark-to-market value of the individual transactions (the 'cross-product net amount');

b the legal opinions referred to in point (b) of paragraph 2 shall address the validity and enforceability of the entire contractual cross-product netting agreement under its terms and the impact of the netting arrangement on the material provisions of any included individual bilateral master agreement.

Article 297

Obligations of institutions

1 An institution shall establish and maintain procedures to ensure that the legal validity and enforceability of its contractual netting is reviewed in the light of changes in the law of relevant jurisdictions referred to in Article 296(2)(b).

2 The institution shall maintain all required documentation relating to its contractual netting in its files.

3 The institution shall factor the effects of netting into its measurement of each counterparty's aggregate credit risk exposure and the institution shall manage its CCR on the basis of those effects of that measurement.

4 In the case of contractual cross-product netting agreements referred to in Article 295, the institution shall maintain procedures under Article 296(2)(c) to verify that any transaction which is to be included in a netting set is covered by a legal opinion referred to in Article 296(2)(b).

Taking into account the contractual cross-product netting agreement, the institution shall continue to comply with the requirements for the recognition of bilateral netting and the

requirements of Chapter 4 for the recognition of credit risk mitigation, as applicable, with respect to each included individual bilateral master agreement and transaction.

Article 298

Effects of recognition of netting as risk-reducing

1 The following treatment applies to contractual netting agreements:

a netting for the purposes of Sections 5 and 6 shall be recognised as set out in those Sections;

b in the case of contracts for novation, the single net amounts fixed by such contracts rather than the gross amounts involved, may be weighted.

In the application of Section 3, institutions may take the contract for novation into account when determining:

(i) the current replacement cost referred to in Article 274(1);

(ii) the notional principal amounts or underlying values referred to in Article 274(2).

In the application of Section 4, in determining the notional amount referred to in Article 275(1) institutions may take into account the contract for novation for the purposes of calculating the notional principal amount In such cases, institutions shall apply the percentages of Table 3.

c In the case of other netting agreements, institutions shall apply Section 3 as follows:

(i) the current replacement cost referred to in Article 274(1) for the contracts included in a netting agreement shall be obtained by taking account of the actual hypothetical net replacement cost which results from the agreement; in the case where netting leads to a net obligation for the institution calculating the net replacement cost, the current replacement cost is calculated as '0';

(ii) the figure for potential future credit exposure referred to in Article 274(2) for all contracts included in a netting agreement shall be reduced in accordance with the following formula:

$$\mathrm{PCE_{red}} = 0.4 \times \mathrm{PCE_{gross}} + 0.6 \times \mathrm{NGR} \times \mathrm{PCE_{gross}}$$

where:

$\mathrm{PCE_{red}}$ = the reduced figure for potential future credit exposure for all contracts with a given counterparty included in a legally valid bilateral netting agreement;

$\mathrm{PCE_{gross}}$ = the sum of the figures for potential future credit exposure for all contracts with a given counterparty which are included in a legally valid bilateral netting agreement and are calculated by multiplying their notional principal amounts by the percentages set out in Table 1;

NGR = the net-to-gross ratio calculated as the quotient of the net replacement cost for all contracts included in a legally valid bilateral netting agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a legally valid bilateral netting agreement with that counterparty (denominator).

2 When carrying out the calculation of the potential future credit exposure in accordance with the formula set out in paragraph 1, institutions may treat perfectly matching contracts included in the netting agreement as if they were a single contract with a notional principal equivalent to the net receipts.

In the application of Article 275(1) institutions may treat perfectly matching contracts included in the netting agreement as if they were a single contract with a notional principal equivalent to the net receipts, and the notional principal amounts shall be multiplied by the percentages given in Table 3.

For the purposes of this paragraph, perfectly matching contracts are forward foreign-exchange contracts or similar contracts in which a notional principal is equivalent to cash flows if the cash flows fall due on the same value date and fully in the same currency.

3 For all other contracts included in a netting agreement, the percentages applicable may be reduced as indicated in Table 6:

TABLE 6

Original maturity	Interest-rate contracts	Foreign-exchange contracts
One year or less	0,35 %	1,50 %
More than one year but not more than two years	0,75 %	3,75 %
Additional allowance for each additional year	0,75 %	2,25 %

4 In the case of interest-rate contracts, institutions may, subject to the consent of their competent authorities, choose either original or residual maturity.

Section 8

Items in the trading book

Article 299

Items in the trading book

1 For the purposes of the application of this Article, Annex II shall include a reference to derivative instruments for the transfer of credit risk as mentioned in point (8) of Section C of Annex I to Directive 2004/39/EC.

2 When calculating risk-weighted exposure amounts for counterparty risk of items in the trading book, institutions shall comply with the following principles:

a in the case of total return swap credit derivatives and credit default swap credit derivatives, to obtain a figure for potential future credit exposure under the method set out in Section 3, the nominal amount of the instrument shall be multiplied by the following percentages:

(i) 5 %, where the reference obligation is one that, if it gave rise to a direct exposure of the institution, would be a qualifying item for the purposes of Part Three, Title IV, Chapter 2;

(ii) 10 %, where the reference obligation is one that, if it gave rise to a direct exposure of the institution, would not be a qualifying item for the purposes of Part Three, Title IV, Chapter 2.

In the case of an institution whose exposure arising from a credit default swap represents a long position in the underlying, the percentage for potential future credit exposure may be 0 %, unless the credit default swap is subject to close-out upon the insolvency of the entity whose exposure arising from the swap represents a short position in the underlying, even though the underlying has not defaulted.

Where the credit derivative provides protection in relation to 'nth to default' amongst a number of underlying obligations, an institution shall determine which of the percentage figures set out in the first subparagraph applies by reference to the obligation with the nth lowest credit quality which, if incurred by the institution, would be a qualifying item for the purposes of Part Three, Title IV, Chapter 2;

b institutions shall not use the Financial Collateral Simple Method set out in Article 222 for the recognition of the effects of financial collateral;

c in the case of repurchase transactions and securities or commodities lending or borrowing transactions booked in the trading book, institutions may recognise as eligible collateral all financial instruments and commodities that are eligible to be included in the trading book;

d for exposures arising from OTC derivative instruments booked in the trading book, institutions may recognise commodities that are eligible to be included in the trading book as eligible collateral;

e for the purposes of calculating volatility adjustments where such financial instruments or commodities which are not eligible under Chapter 4 are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise under such a transaction, and an institution is using the Supervisory Volatility Adjustments Approach under Section 3 of Chapter 4, institutions shall treat such instruments and commodities in the same way as non-main index equities listed on a recognised exchange;

f where an institution is using the Own Estimates of Volatility adjustments Approach under Section 3 of Chapter 4 in respect of financial instruments or commodities which are not eligible under Chapter 4, it shall calculate volatility adjustments for each individual item. Where an institution has obtained the approval to use the internal models approach defined in Chapter 4, it may also apply that approach in the trading book;

g in relation to the recognition of master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions, or other capital market-driven transactions, institutions shall only recognise netting across positions in the trading book and the non-trading book when the netted transactions fulfil the following conditions:

(i) all transactions are marked to market daily;

(ii) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral under Chapter 4 without the application of points (c) to (f) of this paragraph;

h where a credit derivative included in the trading book forms part of an internal hedge and the credit protection is recognised under this Regulation in accordance with Article 204, institutions shall apply one of the following approaches:

(i) treat it as if there were no counterparty risk arising from the position in that credit derivative;

(ii) consistently include for the purpose of calculating the own funds requirements for counterparty credit risk all credit derivatives in the trading book forming part of internal hedges or purchased as protection against a CCR exposure where the credit protection is recognised as eligible under Chapter 4.

Section 9

Own funds requirements for exposures to a central counterparty

Article 300

Definitions

For the purposes of this Section, the following definitions shall apply:

(1) ‘bankruptcy remote’, in relation to client assets, means that effective arrangements exist which ensure that those assets will not be available to the creditors of a CCP or of a clearing member in the event of the insolvency of that CCP or clearing member respectively, or that the assets will not be available to the clearing member to cover losses it incurred following the default of a client or clients other than those that provided those assets;

(2) ‘CCP-related transaction’ means a contract or a transaction listed in Article 301(1) between a client and a clearing member that is directly related to a contract or a transaction listed in that paragraph between that clearing member and a CCP;

(3) ‘clearing member’ means a clearing member as defined in point (14) of Article 2 of Regulation (EU) No 648/2012;

(4) ‘client’ means a client as defined in point (15) of Article 2 of Regulation (EU) No 648/2012 or an undertaking that has established indirect clearing arrangements with a clearing member in accordance with Article 4(3) of that Regulation.

Article 301

Material scope

1 This Section applies to the following contracts and transactions for as long as they are outstanding with a CCP:

a the contracts listed in Annex II and credit derivatives;

b repurchase transactions;

c securities or commodities lending or borrowing transactions;

d long settlement transactions;

e margin lending transactions.

2 Institutions may choose whether to apply one of the following two treatments to the contracts and transactions outstanding with a QCCP listed in paragraph 1:

a the treatment for trade exposures and exposures from default fund contributions set out in Article 306, except for the treatment set out in paragraph 1(b) of that Article, and in Article 307, respectively;

b the treatment set out in Article 310.

3 Institutions shall apply the treatment set out in Article 306, except for the treatment set out in paragraph (1)(a) of that Article, and in Article 309, as applicable, to the contracts and transactions outstanding with a non-qualifying CCP listed in paragraph 1 of this Article.

Article 302

Monitoring of exposures to CCPs

1 Institutions shall monitor all their exposures to CCPs and shall lay down procedures for the regular reporting of information on those exposures to senior management and appropriate committee or committees of the management body.

2 Institutions shall assess, through appropriate scenario analysis and stress testing, whether the level of own funds held against exposures to a CCP, including potential future credit exposures, exposures from default fund contributions and, where the institution is acting as a clearing member, exposures resulting from contractual arrangements as laid down in Article 304, adequately relates to the inherent risks of those exposures.

Article 303

Treatment of clearing members' exposures to CCPs

Where an institution acts as a clearing member, either for its own purposes or as a financial intermediary between a client and a CCP, it shall calculate the own funds requirements for its exposures to a CCP in accordance with Article 301(2) and (3).

Article 304

Treatment of clearing members' exposures to clients

1 Where an institution acts as a clearing member and, in that capacity, acts as a financial intermediary between a client and a CCP, it shall calculate the own funds requirements for its CCP-related transactions with the client in accordance with Sections 1 to 8 of this Chapter and with Title VI of Part Three, as applicable.

2 Where an institution acting as a clearing member enters into a contractual arrangement with a client of another clearing member that facilitates, in accordance with Article 48(5) and (6), of Regulation (EU) No 648/2012, the transfer of positions and collateral referred to in Article 305(2)(b) of this Regulation for that client, and that contractual agreement gives rise to

a contingent obligation for that institution, that institution may attribute an exposure value of zero to that contingent obligation.

3 An institution acting as a clearing member may apply a shorter margin period of risk when calculating the own funds requirement for its exposures to a client in accordance with the Internal Model Method. The margin period of risk applied by the institution shall not be less than five days.

4 An institution acting as a clearing member may multiply its EAD by a scalar when calculating the own funds requirement for its exposures to a client in accordance with the Mark-to-Market Method, the Standardised Method or the Original Exposure Method. The scalars that the institutions may apply are the following:

a 0,71 for a margin period of risk of five days;
b 0,77 for a margin period of risk of six days;
c 0,84 for a margin period of risk of seven days;
d 0,89 for a margin period of risk of eight days;
e 0,95 for a margin period of risk of nine days;
f 1 for a margin period of risk of ten days or more.

5 EBA shall develop draft regulatory technical standards to specify the margin periods of risk that institutions may use for the purposes of paragraphs 3 and 4.

When developing those draft regulatory technical standards, EBA shall apply the following principles:

a it shall define the margin period of risk for each of the types of contracts and transactions listed in Article 301(1);
b the margin periods of risk to be defined in point (a) shall reflect the close-out period of the contracts and transactions referred to in that point.

EBA shall submit those draft regulatory technical standards to the Commission by 30 June 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 305

Treatment of clients' exposures

1 Where an institution is a client, it shall calculate the own funds requirements for its CCP-related transactions with its clearing member in accordance with Sections 1 to 8 of this Chapter and with Title VI of Part Three, as applicable.

2 Without prejudice to the approach specified in paragraph 1, where an institution is a client, it may calculate the own funds requirements for its trade exposures for CCP-related transactions with its clearing member in accordance with Article 306 provided that all the following conditions are met:

a the positions and assets of that institution related to those transactions are distinguished and segregated, at the level of both the clearing member and the CCP, from the positions and assets of both the clearing member and the other clients of that clearing member and as a result of that distinction and segregation those positions and assets are bankruptcy

remote in the event of the default or insolvency of the clearing member or one or more of its other clients;

b laws, regulations, rules and contractual arrangements applicable to or binding that institution or the CCP facilitate the transfer of the client's positions relating to those contracts and transactions and of the corresponding collateral to another clearing member within the applicable margin period of risk in the event of default or insolvency of the original clearing member. In such circumstance, the client's positions and the collateral shall be transferred at market value unless the client requests to close out the position at market value;

c the institution has available an independent, written and reasoned legal opinion that concludes that, in the event of legal challenge, the relevant courts and administrative authorities would find that the client would bear no losses on account of the insolvency of its clearing member or of any of its clearing member's clients under the laws of the jurisdiction of the institution, its clearing member and the CCP, the law governing the transactions and contracts the institution clears through the CCP, the law governing the collateral, and the law governing any contract or agreement necessary to meet the condition in point (b);

d the CCP is a QCCP.

3 Without prejudice to the conditions specified in paragraph 2, where an institution that is a client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default, but all the other conditions set out in paragraph 2 are met, the client may calculate the own funds requirements for its trade exposures for CCP-related transactions with its clearing member in accordance with Article 306, subject to replacing the 2 % risk weight in paragraph 1(a) of that Article with a 4 % risk weight.

4 Where an institution that is a client accesses the services of a CCP through indirect clearing arrangements, in accordance with Article 4(3) of Regulation (EU) No 648/2012, that institution may apply the treatment set out in paragraph 2 or 3 only where the conditions in each paragraph are met at every level of the chain of intermediaries.

Article 306

Own funds requirements for trade exposures

1 An institution shall apply the following treatment to its trade exposures with CCPs:

a it shall apply a risk weight of 2 % to the exposure values of all its trade exposures with QCCPs;

b it shall apply the risk weight used for the Standardised Approach to credit risk as set out in Article 107(2)(b) to all its trade exposures with non-qualifying CCPs;

c where an institution is acting as a financial intermediary between a client and a CCP and the terms of the CCP-related transaction stipulate that the institution is not obligated to reimburse the client for any losses suffered due to changes in the value of that transaction in the event that the CCP defaults, the exposure value of the transaction with the CCP that corresponds to that CCP-related transaction is equal to zero.

2 Notwithstanding paragraph 1, where assets posted as collateral to a CCP or a clearing member are bankruptcy remote in the event that the CCP, the clearing member or one or more of the other clients of the clearing member becomes insolvent, an institution may attribute an exposure value of zero to the counterparty credit risk exposures for those assets.

3 An institution shall calculate exposure values of its trade exposures with a CCP in accordance with Sections 1 to 8 of this Chapter, as applicable.

4 An institution shall calculate the risk-weighted exposure amounts for its trade exposures with CCPs for the purposes of Article 92(3) as the sum of the exposure values of its trade exposures with CCPs, calculated in accordance with paragraphs 2 and 3 of this Article, multiplied by the risk weight determined in accordance with paragraph 1 of this Article.

Article 307

Own funds requirements for pre-funded contributions to the default fund of a CCP

An institution acting as a clearing member shall apply the following treatment to its exposures arising from its contributions to the default fund of a CCP:

(a) it shall calculate the own funds requirement for its pre-funded contributions to the default fund of a QCCP in accordance with the approach set out in Article 308;

(b) it shall calculate the own funds requirement for its pre-funded contributions to the default fund of a non-qualifying CCP in accordance with the approach set out in Article 309.

Article 308

Own funds requirements for pre-funded contributions to the default fund of a QCCP

1 The exposure value for an institution's pre-funded contribution to the default fund of a QCCP (DFi) shall be the amount paid in or the market value of the assets delivered by that institution reduced by any amount of that contribution that the QCCP has already used to absorb its losses following the default of one or more of its clearing members.

2 An institution shall calculate the own funds requirement (K_i) to cover the exposure arising from its pre-funded contribution (DF_i) as follows:

$$K_i = \left(1 + \beta \times \frac{N}{N-2}\right) \times \frac{DF_i}{DF_{CM}} \times K_{CM}$$

where:

β	=	the concentration factor communicated to the institution by the CCP;
N	=	the number of clearing members communicated to the institution by the CCP;
DF_{CM}	=	the sum of pre-funded contributions of all clearing members of the CCP $(\sum_i DF_i)$ communicated to the institution by the CCP;
K_{CM}	=	the sum of the own funds requirements of all clearing members of the CCP calculated in accordance with the applicable formula specified in paragraph 3 $(\sum_i K_i)$.

3 An institution shall calculate K_{CM} as follows:

(a) where $K_{CCP} \leq DF_{CCP}$, the institution shall use the following formula:

$$K_{CM} = c_1 \times DF_{CM}{}^{*}$$

;

(b) where $DF_{CCP} < K_{CCP} \leq DF^*$, the institution shall use the following formula:

$$K_{CM} = c_2 \times (K_{CCP} - DF_{CCP}) + c_1 \times (DF^* - K_{CCP})$$

;

(c) where $DF^* < K_{CCP}$, the institution shall use the following formula:

$$K_{CM} = c_2 \times \mu \times (K_{CCP} - DF^*) + c_2 \times DF_{CM}{}^{*}$$

where:

DF_{CCP} = the pre-funded financial resources of the CCP communicated to the institution by the CCP;

K_{CCP} = the hypothetical capital of the CCP communicated to the institution by the CCP;

DF^* = $DF_{CCP} + DF_{CM}{}^{*}$;

$DF_{CM}{}^{*}$ = $DF_{CM} - 2 \times \bar{DF}_i$;

$\bar{DF}_i$ = the average pre-funded contribution, $\frac{1}{N} \times DF_{CM}$, communicated to the institution by the CCP;

c_1 = a capital factor equal to $\max\left\{\frac{1.6\ \%}{\left(\frac{DF^*}{K_{CCP}}\right)^{0.3}}, 0.16\%\right\}$

c_2 = a capital factor equal to 100 %;

μ = 1,2.

4 An institution shall calculate the risk-weighted exposure amounts for exposures arising from an institution's pre-funded contribution for the purposes of Article 92(3) as the own funds requirement (K_i) determined in accordance with paragraph 2 multiplied by 12,5.

5 Where K_{CCP} is equal to zero, institutions shall use the value for c1 of 0,16 % for the purpose of the calculation in paragraph 3.

Article 309

Own funds requirements for pre-funded contributions to the default fund of a non-qualifying CCP and for unfunded contributions to a non-qualifying CCP

1 An institution shall apply the following formula to calculate the own funds requirement (K_i) for the exposures arising from its pre-funded contributions to the default fund of a non-qualifying CCP (DF_i) and from unfunded contributions (UC_i) to such CCP:

$$K_i = c_2 \times \mu \times (DF_i + UC_i)$$

where c_2 and μ are defined as in Article 308(3).

2 For the purpose of paragraph 1, unfunded contributions means contributions that an institution acting as a clearing member has contractually committed to provide to a CCP after the CCP has depleted its default fund to cover the losses it incurred following the default of one or more of its clearing members.

3 An institution shall calculate the risk-weighted exposure amounts for exposures arising from an institution's pre-funded contribution for the purposes of Article 92(3) as the own funds requirement (K_i) determined in accordance with paragraph 1 multiplied by 12,5.

Article 310

Alternative calculation of own funds requirement for exposures to a QCCP

An institution shall apply the following formula to calculate the own funds requirement (K_i) for the exposures arising from its trade exposures and the trade exposures of its clients (TE_i) and pre-funded contributions (DF_i) to the default fund of a QCCP:

$$K_i = 8\% \times \min[2\% \times TE_i + 1250\% \times DF_i; 20\% \times TE_i]$$

Article 311

Own funds requirements for exposures to CCPs that cease to meet certain conditions

1 An institution shall apply the treatment set out in this Article where one or both of the following conditions have been met:

a the institution has received from a CCP a notification required by point (j)(ii) of Article 50b of Regulation (EU) No 648/2012 that the CCP has stopped calculating K_{CCP};

b it has become known to the institution, following a public announcement or notification from the competent authority of a CCP used by the institution or from that CCP itself, that the CCP will no longer comply with the conditions for authorisation or recognition, as applicable.

2 Where only the condition in point (a) of paragraph 1 has been met, the competent authority of the institution shall verify the reasons why the CCP has stopped calculating K_{CCP}.

Where the competent authority considers that the reasons referred to in the first subparagraph are valid, it may permit institutions in its Member State to apply the treatment set out in Article 310 to their trade exposures and default fund contributions to that CCP. Where it grants such permission, it shall disclose the reasons for its decision.

Where the competent authority considers that the reasons referred to in the first subparagraph are not valid, all institutions in its Member State, irrespective of the treatment they chose in accordance with Article 301(2), shall apply the treatment set out in points (a) to (d) of paragraph 3 of this Article.

3 Where the condition in point (b) of paragraph 1 has been met, irrespective of whether the condition in point (a) of that paragraph has been met or not, an institution shall, within three months of the circumstance set out in point (b) of that paragraph arising, or earlier where the competent authority of the institution requires it, do the following with respect to its exposures to that CCP:

a cease to apply the treatment it chose in accordance with Article 301(2);

b apply the treatment set out in point (b) of Article 306(1) to its trade exposures to that CCP;

c apply the treatment set out in Article 309 to its pre-funded contributions to the default fund of that CCP and to its unfunded contributions to that CCP;

d treat exposures other than those listed in points (b) and (c) to that CCP as exposures to a corporate in accordance with the Standardised Approach for credit risk as set out in Chapter 2.**]**

Editorial Information

X1 Substituted by Corrigendum to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

Status:
Point in time view as at 31/01/2020.

Changes to legislation:
There are currently no known outstanding effects for the Regulation (EU) No 575/2013 of the European Parliament and of the Council, CHAPTER 6.