Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast) (repealed)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After

IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

#### ANNEX I

# CALCULATING CAPITAL REQUIREMENTS FOR POSITION RISK **GENERAL PROVISIONS** Netting

- 1. The excess of an institution's long (short) positions over its short (long) positions in the same equity, debt and convertible issues and identical financial futures, options, warrants and covered warrants shall be its net position in each of those different instruments. In calculating the net position the competent authorities shall allow positions in derivative instruments to be treated, as laid down in points 4 to 7, as positions in the underlying (or notional) security or securities. Institutions' holdings of their own debt instruments shall be disregarded in calculating specific risk under point 14.
- 2. No netting shall be allowed between a convertible and an offsetting position in the instrument underlying it, unless the competent authorities adopt an approach under which the likelihood of a particular convertible's being converted is taken into account or have a capital requirement to cover any loss which conversion might entail.
- All net positions, irrespective of their signs, must be converted on a daily basis into 3. the institution's reporting currency at the prevailing spot exchange rate before their aggregation.

Particular4.Interest-rate futures, forward-rate agreements (FRAs) and forward commitments instruments buy or sell debt instruments shall be treated as combinations of long and short positions. Thus a long interest-rate futures position shall be treated as a combination of a borrowing maturing on the delivery date of the futures contract and a holding of an asset with maturity date equal to that of the instrument or notional position underlying the futures contract in question. Similarly a sold FRA will be treated as a long position with a maturity date equal to the settlement date plus the contract period, and a short position with maturity equal to the settlement date. Both the borrowing and the asset holding shall be included in the first category set out in Table 1 in point 14 in order to calculate the capital required against specific risk for interest-rate futures and FRAs. A forward commitment to buy a debt instrument shall be treated as a combination of a borrowing maturing on the delivery date and a long (spot) position in the debt instrument itself. The borrowing shall be included in the first category set out in Table 1 in point 14 for purposes of specific risk, and the debt instrument under whichever column is appropriate for it in the same table.

The competent authorities may allow the capital requirement for an exchange-traded future to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the future and that it is at least equal to the capital requirement for a future that would result from a calculation made using the method set out in this Annex or applying the internal models method described in Annex V. The competent authorities may also allow the capital requirement for an OTC derivatives contract of the type referred to in this point cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the derivatives contract and that it is at least equal to the capital requirement for the contract in question that would result from a calculation made using the method set out in the this Annex or applying the internal models method described in Annex V.

For the purposes of this point, 'long position' means a position in which an institution has fixed the interest rate it will receive at some time in the future, and 'short position' means a position in which it has fixed the interest rate it will pay at some time in the future.

5. Options on interest rates, debt instruments, equities, equity indices, financial futures, swaps and foreign currencies shall be treated as if they were positions equal in value to the amount of the underlying instrument to which the option refers, multiplied by its delta for the purposes of this Annex. The latter positions may be netted off against any offsetting positions in the identical underlying securities or derivatives. The delta used shall be that of the exchange concerned, that calculated by the competent authorities or, where that is not available or for OTC-options, that calculated by the institution itself, subject to the competent authorities being satisfied that the model used by the institution is reasonable.

However, the competent authorities may also prescribe that institutions calculate their deltas using a methodology specified by the competent authorities.

Other risks, apart from the delta risk, associated with options shall be safeguarded against. The competent authorities may allow the requirement against a written exchange-traded option to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement against an option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V. The competent authorities may also allow the capital requirement for an OTC option cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement for an OTC option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V. In addition they may allow the requirement on a bought exchange-traded or OTC option to be the same as that for the instrument underlying it, subject to the constraint that the resulting requirement does not exceed the market value of the option. The requirement against a written OTC option shall be set in relation to the instrument underlying it.

- 6. Warrants relating to debt instruments and equities shall be treated in the same way as options under point 5.
- 7. Swaps shall be treated for interest-rate risk purposes on the same basis as on-balance-sheet instruments. Thus, an interest-rate swap under which an institution receives floating-rate interest and pays fixed-rate interest shall be treated as equivalent to a long position in a floating-rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument with the same maturity as the swap itself.

# A. TREATMENT OF THE PROTECTION SELLER

8. When calculating the capital requirement for market risk of the party who assumes the credit risk (the 'protection seller'), unless specified differently, the notional amount of the credit derivative contract must be used. For the purpose of calculating the specific risk charge, other than for total return swaps, the maturity of the credit derivative contract is applicable instead of the maturity of the obligation. Positions are determined as follows:

- (i) A total return swap creates a long position in the general market risk of the reference obligation and a short position in the general market risk of a government bond with a maturity equivalent to the period until the next interest fixing and which is assigned a 0 % risk weight under Annex VI of Directive 2006/48/EC. It also creates a long position in the specific risk of the reference obligation.
- (ii) A credit default swap does not create a position for general market risk. For the purposes of specific risk, the institution must record a synthetic long position in an obligation of the reference entity, unless the derivative is rated externally and meets the conditions for a qualifying debt item, in which case a long position in the derivative is recorded. If premium or interest payments are due under the product, these cash flows must be represented as notional positions in government bonds.
- (iii) A single name credit linked note creates a long position in the general market risk of the note itself, as an interest rate product. For the purpose of specific risk, a synthetic long position is created in an obligation of the reference entity. An additional long position is created in the issuer of the note. Where the credit linked note has an external rating and meets the conditions for a qualifying debt item, a single long position with the specific risk of the note need only be recorded.
- (iv) In addition to a long position in the specific risk of the issuer of the note, a multiple name credit linked note providing proportional protection creates a position in each reference entity, with the total notional amount of the contract assigned across the positions according to the proportion of the total notional amount that each exposure to a reference entity represents. Where more than one obligation of a reference entity can be selected, the obligation with the highest risk weighting determines the specific risk.
  - Where a multiple name credit linked note has an external rating and meets the conditions for a qualifying debt item, a single long position with the specific risk of the note need only be recorded.
- (v) A first-asset-to-default credit derivative creates a position for the notional amount in an obligation of each reference entity. If the size of the maximum credit event payment is lower than the capital requirement under the method in the first sentence of this point, the maximum payment amount may be taken as the capital requirement for specific risk.

A second-asset-to-default credit derivative creates a position for the notional amount in an obligation of each reference entity less one (that with the lowest specific risk capital requirement). If the size of the maximum credit event payment is lower than the capital requirement under the method in the first sentence of this point, this amount may be taken as the capital requirement for specific risk.

If a first or second-asset to default derivative is externally rated and meets the conditions for a qualifying debt item, then the protection seller need only calculate one specific risk charge reflecting the rating of the derivative.

# IF1B. TREATMENT OF THE PROTECTION BUYER

For the party who transfers credit risk (the protection buyer), the positions are determined as the mirror principle of the protection seller, with the exception of a credit linked note (which entails no short position in the issuer). If at a given moment there is a call option in combination with a step-up, such moment is treated as the maturity of the protection. In the case of first-to-default credit derivatives and nth-to-default credit derivatives, the following treatment applies instead of the mirror principle.

First-to-default credit derivatives

Where an institution obtains credit protection for a number of reference entities underlying a credit derivative under the terms that the first default among the assets shall trigger payment and that this credit event shall terminate the contract, the institution may offset specific risk for the reference entity to which the lowest specific risk percentage charge among the underlying reference entities applies according to Table 1 of this Annex.

## Nth-to-default credit derivatives

Where the nth default among the exposures triggers payment under the credit protection, the protection buyer may only offset specific risk if protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred. In such cases, the methodology set out above for first-to-default credit derivatives shall be followed appropriately modified for nth-to-default products.]

- 9. Institutions which mark to market and manage the interest-rate risk on the derivative instruments covered in points 4 to 7 on a discounted-cash-flow basis may use sensitivity models to calculate the positions referred to in those points and may use them for any bond which is amortised over its residual life rather than via one final repayment of principal. Both the model and its use by the institution must be approved by the competent authorities. These models should generate positions which have the same sensitivity to interest-rate changes as the underlying cash flows. This sensitivity must be assessed with reference to independent movements in sample rates across the yield curve, with at least one sensitivity point in each of the maturity bands set out in Table 2 of point 20. The positions shall be included in the calculation of capital requirements according to the provisions laid down in points 17 to 32.
- 10. Institutions which do not use models under point 9 may, with the approval of the competent authorities, treat as fully offsetting any positions in derivative instruments covered in points 4 to 7 which meet the following conditions at least:
- (a) the positions are of the same value and denominated in the same currency;
- (b) the reference rate (for floating-rate positions) or coupon (for fixed-rate positions) is closely matched; and
- (c) the next interest-fixing date or, for fixed coupon positions, residual maturity corresponds with the following limits:
  - (i) less than one month hence: same day;
  - (ii) between one month and one year hence: within seven days; and
  - (iii) over one year hence: within 30 days.
- 11. The transferor of securities or guaranteed rights relating to title to securities in a repurchase agreement and the lender of securities in a securities lending shall include these securities in the calculation of its capital requirement under this Annex provided that such securities meet the criteria laid down in Article 11.

Specific and general risks

12. The position risk on a traded debt instrument or equity (or debt or equity derivative) shall be divided into two components in order to calculate the capital required against it. The first shall be its specific-risk component — this is the risk of a price change in the instrument concerned due to factors related to its issuer or, in the case of a derivative, the issuer of the underlying instrument. The second component shall cover its general risk — this is the risk of a price change in the instrument due (in the case of a traded debt instrument or debt derivative) to a change in the level of interest rates

or (in the case of an equity or equity derivative) to a broad equity-market movement unrelated to any specific attributes of individual securities.

#### **Textual Amendments**

F1 Substituted by Commission Directive 2009/27/EC of 7 April 2009 amending certain Annexes to Directive 2006/49/EC of the European Parliament and of the Council as regards technical provisions concerning risk management (Text with EEA relevance).

## TRADED DEBT INSTRUMENTS

13. Net positions shall be classified according to the currency in which they are denominated and shall calculate the capital requirement for general and specific risk in each individual currency separately.

# Specific risk

14. The institution shall assign its net positions in the trading book, as calculated in accordance with point 1 to the appropriate categories in Table 1 on the basis of their issuer/obligor, external or internal credit assessment, and residual maturity, and then multiply them by the weightings shown in that table. It shall sum its weighted positions (regardless of whether they are long or short) in order to calculate its capital requirement against specific risk.

# **I**<sup>F1</sup>TABLE 1

Categories	Specific risk capital charge
Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or Member States' regional government or local authorities which would qualify for credit quality step 1 or which would receive a 0 % risk weight under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC.	0 %
Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or Member States' regional governments or local authorities which would qualify for credit quality step 2 or 3 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC, and debt securities issued or guaranteed by institutions which would qualify for credit quality step 1 or 2 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC, and debt securities issued or guaranteed by	0,25 % (residual term to final maturity six months or less) 1,00 % (residual term to final maturity greater than six months and up to and including 24 months) 1,60 % (residual term to maturity exceeding 24 months)

institutions which would qualify for credit quality step 3 under the rules for the risk weighting of exposures under point 29, Part 1 of Annex VI to Directive 2006/48/EC, and debt securities issued or guaranteed by corporates which would qualify for credit quality step 1, 2 or 3 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC.

Other qualifying items as defined in point 15.

Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or Member States' regional governments or local authorities or institutions which would qualify for credit quality step 4 or 5 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC, and debt securities issued or guaranteed by institutions which would qualify for credit quality step 3 under the rules for the risk weighting of exposures under point 26 of Part 1 of Annex VI to Directive 2006/48/EC, and debt securities issued or guaranteed by corporates which would qualify for credit quality step 4 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC. Exposures for which a credit assessment by a nominated ECAI is not available.

8.0 %

Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or Member States' regional governments or local authorities or institutions which would qualify for credit quality step 6 under the rules for the risk weighting of exposures under Articles 78 to 83 of Directive 2006/48/EC, and debt securities issued or guaranteed by corporates which would qualify for credit quality step 5 or 6 under the rules for the risk weighting of exposures

12,0 %]

under Articles 78 to 83 of Directive 2006/48/EC.

For institutions which apply the rules for the risk weighting of exposures under Articles 84 to 89 of Directive 2006/48/EC, to qualify for a credit quality step the obligor of the exposure shall have an internal rating with a PD equivalent to or lower than that associated with the appropriate credit quality step under the rules for the risk weighting of exposures to corporates under Articles 78 to 83 of that Directive.

Instruments issued by a non-qualifying issuer shall receive a specific risk capital charge of 8 % or 12 % according to Table 1. Competent authorities may require institutions to apply a higher specific risk charge to such instruments and/or to disallow offsetting for the purposes of defining the extent of general market risk between such instruments and any other debt instruments.

Securitisation exposures that would be subject to a deduction treatment as set out in Article 66(2) of Directive 2006/48/EC, or risk-weighted at 1,25 % as set out in Part 4 of Annex IX to that Directive, shall be subject to a capital charge that is no less than that set out under those treatments. Unrated liquidity facilities shall be subject to a capital charge that is no less than that set out in Part 4 of Annex IX to Directive 2006/48/EC.

- 15. For the purposes of point 14 qualifying items shall include:
- (a) long and short positions in assets qualifying for a credit quality step corresponding at least to investment grade in the mapping process described in Title V, Chapter 2, Section 3, Sub-section 1 of Directive 2006/48/EC;
- (b) long and short positions in assets which, because of the solvency of the issuer, have a PD which is not higher than that of the assets referred to under (a), under the approach described in Title V, Chapter 2, Section 3, Sub-section 2 of Directive 2006/48/EC;
- (c) long and short positions in assets for which a credit assessment by a nominated external credit assessment institution is not available and which meet the following conditions:
  - (i) they are considered by the institutions concerned to be sufficiently liquid;
  - (ii) their investment quality is, according to the institution's own discretion, at least equivalent to that of the assets referred to under point (a); and
  - (iii) they are listed on at least one regulated market in a Member State or on a stock exchange in a third country provided that the exchange is recognised by the competent authorities of the relevant Member State;
- (d) long and short positions in assets issued by institutions subject to the capital adequacy requirements set out in Directive 2006/48/EC which are considered by the institutions concerned to be sufficiently liquid and whose investment quality is, according to the institution's own discretion, at least equivalent to that of the assets referred to under point (a); and
- (e) securities issued by institutions that are deemed to be of equivalent, or higher, credit quality than those associated with credit quality step 2 under the rules for the risk weighting of exposures to institutions set out in Articles 78 to 83 of Directive 2006/48/ EC and that are subject to supervisory and regulatory arrangements comparable to those under this Directive.

The manner in which the debt instruments are assessed shall be subject to scrutiny by the competent authorities, which shall overturn the judgment of the institution if they consider that the instruments concerned are subject to too high a degree of specific risk to be qualifying items.

16. The competent authorities shall require the institution to apply the maximum weighting shown in Table 1 to point 14 to instruments that show a particular risk because of the insufficient solvency of the issuer.

#### General risk

- (a) Maturity-based
- 17. The procedure for calculating capital requirements against general risk involves two basic steps. First, all positions shall be weighted according to maturity (as explained in point 18), in order to compute the amount of capital required against them. Second, allowance shall be made for this requirement to be reduced when a weighted position is held alongside an opposite weighted position within the same maturity band. A reduction in the requirement shall also be allowed when the opposite weighted positions fall into different maturity bands, with the size of this reduction depending both on whether the two positions fall into the same zone, or not, and on the particular zones they fall into. There are three zones (groups of maturity bands) altogether.
- 18. The institution shall assign its net positions to the appropriate maturity bands in column 2 or 3, as appropriate, in Table 2 in point 20. It shall do so on the basis of residual maturity in the case of fixed-rate instruments and on the basis of the period until the interest rate is next set in the case of instruments on which the interest rate is variable before final maturity. It shall also distinguish between debt instruments with a coupon of 3 % or more and those with a coupon of less than 3 % and thus allocate them to column 2 or column 3 in Table 2. It shall then multiply each of them by the weighing for the maturity band in question in column 4 in Table 2.
- 19. It shall then work out the sum of the weighted long positions and the sum of the weighted short positions in each maturity band. The amount of the former which are matched by the latter in a given maturity band shall be the matched weighted position in that band, while the residual long or short position shall be the unmatched weighted position for the same band. The total of the matched weighted positions in all bands shall then be calculated.
- 20. The institution shall compute the totals of the unmatched weighted long positions for the bands included in each of the zones in Table 2 in order to derive the unmatched weighted long position for each zone. Similarly, the sum of the unmatched weighted short positions for each band in a particular zone shall be summed to compute the unmatched weighted short position for that zone. That part of the unmatched weighted long position for a given zone that is matched by the unmatched weighted short position for the same zone shall be the matched weighted position for that zone. That part of the unmatched weighted long or unmatched weighted short position for a zone that cannot be thus matched shall be the unmatched weighted position for that zone.

TABLE 2

Zone	ne Maturity band		Weighting	Assumed
	Coupon of 3 % or more	Coupon of less than 3 %	(in %)	interest rate change (in %)
One	$0 \le 1$ month	$0 \le 1$ month	0,0	_
	$> 1 \le 3$ months	$> 1 \le 3$ months	0,2	1,0
	$> 3 \le 6$ months	$>$ 3 $\leq$ 6 months	0,4	1,0

	$>$ 6 $\leq$ 12 months	> 6 ≤ 12 months	0,7	1,0
Two	> 1 ≤ 2 years	> 1,0 ≤ 1,9 years	1,25	0,9
	$> 2 \le 3$ years	> 1,9 ≤ 2,8 years	1,75	0,8
	$> 3 \le 4$ years	> 2,8 ≤ 3,6 years	2,25	0,75
Three	$> 4 \le 5$ years	> 3,6 ≤ 4,3 years	2,75	0,75
	> 5 ≤ 7 years	> 4,3 ≤ 5,7 years	3,25	0,7
	> 7 ≤ 10 years	> 5,7 ≤ 7,3 years	3,75	0,65
	> 10 ≤ 15 years	> 7,3 ≤ 9,3 years	4,5	0,6
	> 15 ≤ 20 years	> 9,3 ≤ 10,6 years	5,25	0,6
	> 20 years	$> 10.6 \le 12.0$ years	6,0	0,6
		> 12,0 ≤ 20,0 years	8,0	0,6
		> 20 years	12,5	0,6

- 21. The amount of the unmatched weighted long (short) position in zone one which is matched by the unmatched weighted short (long) position in zone two shall then be computed. This shall be referred to in point 25 as the matched weighted position between zones one and two. The same calculation shall then be undertaken with regard to that part of the unmatched weighted position in zone two which is left over and the unmatched weighted position in zone three in order to calculate the matched weighted position between zones two and three.
- 22. The institution may, if it wishes, reverse the order in point 21 so as to calculate the matched weighted position between zones two and three before calculating that position between zones one and two.
- 23. The remainder of the unmatched weighted position in zone one shall then be matched with what remains of that for zone three after the latter's matching with zone two in order to derive the matched weighted position between zones one and three.
- 24. Residual positions, following the three separate matching calculations in points 21, 22 and 23, shall be summed.
- 25. The institution's capital requirement shall be calculated as the sum of:
- (a) 10 % of the sum of the matched weighted positions in all maturity bands;
- (b) 40 % of the matched weighted position in zone one;

- (c) 30 % of the matched weighted position in zone two;
- (d) 30 % of the matched weighted position in zone three;
- (e) 40 % of the matched weighted position between zones one and two and between zones two and three (see point 21);
- (f) 150 % of the matched weighted position between zones one and three; and
- (g) 100 % of the residual unmatched weighted positions.
- (b) Duration-based
- 26. The competent authorities may allow institutions in general or on an individual basis to use a system for calculating the capital requirement for the general risk on traded debt instruments which reflects duration, instead of the system set out in points 17 to 25, provided that the institution does so on a consistent basis.
- 27. Under a system referred to in point 26 the institution shall take the market value of each fixed-rate debt instrument and thence calculate its yield to maturity, which is implied discount rate for that instrument. In the case of floating-rate instruments, the institution shall take the market value of each instrument and thence calculate its yield on the assumption that the principal is due when the interest rate can next be changed.
- 28. The institution shall then calculate the modified duration of each debt instrument on the basis of the following formula: modified duration = ((duration (D))/(1+r)), where:  $D = ((\Sigma_{t=1}^{m} ((t C_t)/((1+r)^t)))/(\Sigma_{t=1}^{m} ((C_t)/((1+r)^t))))$

#### where:

R = vield to maturity (see point 25),

 $C_t = \text{cash payment in time t}$ 

M = total maturity (see point 25).

29. The institution shall then allocate each debt instrument to the appropriate zone in Table 3. It shall do so on the basis of the modified duration of each instrument.

TABLE 3

Zone	Modified duration(in years)	Assumed interest (change in %)
One	> 0 \le 1,0	1,0
Two	> 1,0 \le 3,6	0,85
Three	> 3,6	0,7

- 30. The institution shall then calculate the duration-weighted position for each instrument by multiplying its market price by its modified duration and by the assumed interestrate change for an instrument with that particular modified duration (see column 3 in Table 3).
- 31. The institution shall calculate its duration-weighted long and its duration-weighted short positions within each zone. The amount of the former which are matched by the latter within each zone shall be the matched duration-weighted position for that zone.

The institution shall then calculate the unmatched duration-weighted positions for each zone. It shall then follow the procedures laid down for unmatched weighted positions in points 21 to 24.

- 32. The institution's capital requirement shall then be calculated as the sum of:
- (a) 2 % of the matched duration-weighted position for each zone;
- (b) 40 % of the matched duration-weighted positions between zones one and two and between zones two and three;
- (c) 150 % of the matched duration-weighted position between zones one and three; and
- (d)  $\,$  100 % of the residual unmatched duration-weighted positions. EQUITIES
- The institution shall sum all its net long positions and all its net short positions in accordance with point 1. The sum of the two figures shall be its overall gross position. The difference between them shall be its overall net position.

# Specific risk

- 34. The institution shall sum all its net long positions and all its net short positions in accordance with point 1. It shall multiply its overall gross position by 4 % in order to calculate its capital requirement against specific risk.
- 35. By derogation from point 34, the competent authorities may allow the capital requirement against specific risk to be 2 % rather than 4 % for those portfolios of equities that an institution holds which meet the following conditions:
- the equities shall not be those of issuers which have issued only traded debt instruments that currently attract an 8 % or 12 % requirement in Table 1 to point 14 or that attract a lower requirement only because they are guaranteed or secured;
- (b) the equities must be adjudged highly liquid by the competent authorities according to objective criteria; and
- (c) no individual position shall comprise more than 5 % of the value of the institution's whole equity portfolio.

For the purpose of point (c), the competent authorities may authorise individual positions of up to 10 % provided that the total of such positions does not exceed 50 % of the portfolio. General risk

36. Its capital requirement against general risk shall be its overall net position multiplied by 8 %.

# Stock-index futures

- 37. Stock-index futures, the delta-weighted equivalents of options in stock-index futures and stock indices collectively referred to hereafter as 'stock-index futures', may be broken down into positions in each of their constituent equities. These positions may be treated as underlying positions in the equities in question, and may, subject to the approval of the competent authorities, be netted against opposite positions in the underlying equities themselves.
- 38. The competent authorities shall ensure that any institution which has netted off its positions in one or more of the equities constituting a stock-index future against one or more positions in the stock-index future itself has adequate capital to cover the risk of loss caused by the future's values not moving fully in line with that of its constituent equities; they shall also do this when an institution holds opposite positions

- in stock-index futures which are not identical in respect of either their maturity or their composition or both.
- 39. By derogation from points 37 and 38, stock-index futures which are exchange traded and in the opinion of the competent authorities represent broadly diversified indices shall attract a capital requirement against general risk of 8 %, but no capital requirement against specific risk. Such stock-index futures shall be included in the calculation of the overall net position in point 33, but disregarded in the calculation of the overall gross position in the same point.
- 40. If a stock-index future is not broken down into its underlying positions, it shall be treated as if it were an individual equity. However, the specific risk on this individual equity can be ignored if the stock-index future in question is exchange traded and, in the opinion of the competent authorities, represents a broadly diversified index.

#### **UNDERWRITING**

41. In the case of the underwriting of debt and equity instruments, the competent authorities may allow an institution to use the following procedure in calculating its capital requirements. Firstly, it shall calculate the net positions by deducting the underwriting positions which are subscribed or sub-underwritten by third parties on the basis of formal agreements. Secondly, it shall reduce the net positions by the reduction factors in Table 4

TABLE 4

working day 0:	100 %
working day 1:	90 %
working days 2 to 3:	75 %
working day 4:	50 %
working day 5:	25 %
after working day 5:	0 %.

<sup>&#</sup>x27;Working day zero' shall be the working day on which the institution becomes unconditionally committed to accepting a known quantity of securities at an agreed price.

Thirdly, it shall calculate its capital requirements using the reduced underwriting positions.

The competent authorities shall ensure that the institution holds sufficient capital against the risk of loss which exists between the time of the initial commitment and working day 1. SPECIFIC RISK CAPITAL CHARGES FOR TRADING BOOK POSITIONS HEDGED BY CREDIT DERIVATIVES

- 42. An allowance shall be given for protection provided by credit derivatives, in accordance with the principles set out in points 43 to 46.
- 43. Full allowance shall be given when the value of two legs always move in the opposite direction and broadly to the same extent. This will be the case in the following situations:
- (a) the two legs consist of completely identical instruments; or
- (b) a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure

(i.e., the cash position). The maturity of the swap itself may be different from that of the underlying exposure.

In these situations, a specific risk capital charge should not be applied to either side of the position.

- 44. An 80 % offset will be applied when the value of two legs always move in the opposite direction and where there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency of the underlying exposure. In addition, key features of the credit derivative contract should not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk, an 80 % specific risk offset will be applied to the side of the transaction with the higher capital charge, while the specific risk requirements on the other side shall be zero.
- 45. Partial allowance shall be given when the value of two legs usually move in the opposite direction. This would be the case in the following situations:
- (a) the position falls under point 43(b) but there is an asset mismatch between the reference obligation and the underlying exposure. However, the positions meet the following requirements:
  - (i) the reference obligation ranks pari passu with or is junior to the underlying obligation; and
  - (ii) the underlying obligation and reference obligation share the same obligor and have legally enforceable cross-default or cross-acceleration clauses;
- (b) the position falls under point 43(a) or point 44 but there is a currency or maturity mismatch between the credit protection and the underlying asset (currency mismatches should be included in the normal reporting foreign exchange risk under Annex III); or
- (c) the position falls under point 44 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

In each of those situations, rather than adding the specific risk capital requirements for each side of the transaction, only the higher of the two capital requirements shall apply.

46. In all situations not falling under points 43 to 45, a specific risk capital charge will be assessed against both sides of the positions.

Capital charges for CIUs in the trading book

- 47. The capital requirements for positions in CIUs which meet the conditions specified in Article 11 for a trading book capital treatment shall be calculated in accordance with the methods set out in points 48 to 56.
- 48. Without prejudice to other provisions in this section, positions in CIUs shall be subject to a capital requirement for position risk (specific and general) of 32 %. Without prejudice to the provisions of the fourth paragraph of point 2.1 of Annex III or the sixth paragraph of point 12 of Annex V (commodity risk) taken together with the fourth paragraph of point 2.1 of Annex III, where the modified gold treatment set out in those points is used, positions in CIUs shall be subject to a capital requirement for position risk (specific and general) and foreign-exchange risk of no more than 40 %.

- 49. Institutions may determine the capital requirement for positions in CIUs which meet the criteria set out in point 51, by the methods set out in points 53 to 56.
- 50. Unless noted otherwise, no netting is permitted between the underlying investments of a CIU and other positions held by the institution.

#### **GENERAL CRITERIA**

- 51. The general eligibility criteria for using the methods in points 53 to 56, for CIUs issued by companies supervised or incorporated within the Community are that:
- (a) the CIU's prospectus or equivalent document shall include:
  - (i) the categories of assets the CIU is authorised to invest in;
  - (ii) if investment limits apply, the relative limits and the methodologies to calculate them;
  - (iii) if leverage is allowed, the maximum level of leverage; and
  - (iv) if investment in OTC financial derivatives or repo-style transactions are allowed, a policy to limit counterparty risk arising from these transactions;
- (b) the business of the CIU shall be reported in half-yearly and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period;
- (c) the units/shares of the CIU are redeemable in cash, out of the undertaking's assets, on a daily basis at the request of the unit holder;
- (d) investments in the CIU shall be segregated from the assets of the CIU manager; and
- (e) there shall be adequate risk assessment of the CIU, by the investing institution.
- 52. Third country CIUs may be eligible if the requirements in points (a) to (e) of point 51 are met, subject to the approval of the institution's competent authority.

# SPECIFIC METHODS

- 53. Where the institution is aware of the underlying investments of the CIU on a daily basis, the institution may look through to those underlying investments in order to calculate the capital requirements for position risk (general and specific) for those positions in accordance with the methods set out in this Annex or, if permission has been granted, in accordance with the methods set out in Annex V. Under this approach, positions in CIUs shall be treated as positions in the underlying investments of the CIU. Netting is permitted between positions in the underlying investments of the CIU and other positions held by the institution, as long as the institution holds a sufficient quantity of units to allow for redemption/creation in exchange for the underlying investments.
- 54. Institutions may calculate the capital requirements for position risk (general and specific) for positions in CIUs in accordance with the methods set out in this Annex or, if permission has been granted, in accordance with the methods set out in Annex V, to assumed positions representing those necessary to replicate the composition and performance of the externally generated index or fixed basket of equities or debt securities referred to in (a), subject to the following conditions:
- (a) the purpose of the CIU's mandate is to replicate the composition and performance of an externally generated index or fixed basket of equities or debt securities; and

- (b) a minimum correlation of 0.9 between daily price movements of the CIU and the index or basket of equities or debt securities it tracks can be clearly established over a minimum period of six months. 'Correlation' in this context means the correlation coefficient between daily returns on the CIU and the index or basket of equities or debt securities it tracks.
- 55. Where the institution is not aware of the underlying investments of the CIU on a daily basis, the institution may calculate the capital requirements for position risk (general and specific) in accordance with the methods set out in this Annex, subject to the following conditions:
- (a) it will be assumed that the CIU first invests to the maximum extent allowed under its mandate in the asset classes attracting the highest capital requirement for position risk (general and specific), and then continues making investments in descending order until the maximum total investment limit is reached. The position in the CIU will be treated as a direct holding in the assumed position;
- (b) institutions shall take account of the maximum indirect exposure that they could achieve by taking leveraged positions through the CIU when calculating their capital requirement for position risk, by proportionally increasing the position in the CIU up to the maximum exposure to the underlying investment items resulting from the mandate; and
- (c) should the capital requirement for position risk (general and specific) according to this point exceed that set out in point 48, the capital requirement shall be capped at that level.
- 56. Institutions may rely on a third party to calculate and report capital requirements for position risk (general and specific) for positions in CIUs falling under points 53 and 55, in accordance with the methods set out in this Annex, provided that the correctness of the calculation and the report is adequately ensured.

## ANNEX II

# CALCULATING CAPITAL REQUIREMETNS FOR SETTLEMENT AND COUNTERPARTY CREDIT RISK SETTLEMENT/DELIVERY RISK

1. In the case of transactions in which debt instruments, equities, foreign currencies and commodities (excluding repurchase and reverse repurchase agreements and securities or commodities lending and securities or commodities borrowing) are unsettled after their due delivery dates, an institution must calculate the price difference to which it is exposed. This is the difference between the agreed settlement price for the debt instrument, equity, foreign currency or commodity in question and its current market value, where the difference could involve a loss for the institution. It must multiply this difference by the appropriate factor in column A of Table 1 in order to calculate its capital requirement.

## TABLE 1

Number of working days after due	(%)
settlement date	

5 — 15	8
16 — 30	50
31 — 45	75
46 or more	100

## FREE DELIVERIES

- 2. An institution shall be required to hold own funds, as set out in Table 2, if:
- (a) it has paid for securities, foreign currencies or commodities before receiving them or it has delivered securities, foreign currencies or commodities before receiving payment for them; and
- (b) in the case of cross-border transactions, one day or more has elapsed since it made that payment or delivery.

TABLE 2

Capital	l treatment	for	free	de	liverie	es

Transaction Type	Up to first contractual payment or delivery leg	From first contractual payment or delivery leg up to four days after second contractual payment or delivery leg	From 5 business days post second contractual payment or delivery leg until extinction of the transaction
Free delivery	No capital charge	Treat as an exposure	Deduct value transferred plus current positive exposure from own funds

3. In applying a risk weight to free delivery exposures treated according to column 3 of Table 2, institutions using the approach set out in Articles 84 to 89 of Directive 2006/48/EC, may assign PDs to counterparties, for which they have no other non-trading book exposure, on the basis of the counterparty's external rating. Institutions using own estimates of loss given defaults ('LGDs') may apply the LGD set out in point 8 of Part 2 of Annex VII to Directive 2006/48/EC to free delivery exposures treated according to column 3 of Table 2 provided that they apply it to all such exposures. Alternatively, institutions using the approach set out in Articles 84 to 89 of Directive 2006/48/EC may apply the risk weights, as set out in Articles 78 to 83 of that Directive provided that they apply them to all such exposures or may apply a 100 % risk weight to all such exposures.

If the amount of positive exposure resulting from free delivery transactions is not material, institutions may apply a risk weight of 100 % to these exposures.

4. In cases of a system wide failure of a settlement or clearing system, competent authorities may waive the capital requirements calculated as set out in points 1 and 2 until the situation is rectified. In this case, the failure of a counterparty to settle a trade shall not be deemed a default for purposes of credit risk.

# COUNTERPARTY CREDIT RISK (CCR)

- 5. An institution shall be required to hold capital against the CCR arising from exposures due to the following:
- (a) OTC derivative instruments and credit derivatives;
- (b) Repurchase agreements, reverse repurchase agreements, securities or commodities lending or borrowing transactions based on securities or commodities included in the trading book;
- (c) margin lending transactions based on securities or commodities; and
- (d) long settlement transactions.
- 6. Subject to the provisions of points 7 to 10, exposure values and risk-weighted exposure amounts for such exposures shall be calculated in accordance with the provisions of Section 3 of Chapter 2 of Title V of Directive 2006/48/EC with references to 'credit institutions' in that Section interpreted as references to 'institutions', references to 'parent credit institutions' interpreted as references to 'parent institutions', and with concomitant terms interpreted accordingly.
- 7. For the purposes of point 6:

Annex IV to Directive 2006/48/EC shall be considered to be amended to include point 8 of Section C of Annex I to Directive 2004/39/EC;

Annex III to Directive 2006/48/EC shall be considered to be amended to include, after the footnotes of Table 1, the following text:

To obtain a figure for potential future credit exposure in the case of total return swap credit derivatives and credit default swap credit derivatives, the nominal amount of the instrument is multiplied by the following percentages:

- where the reference obligation is one that if it gave rise to a direct exposure of the institution it would be a qualifying item for the purposes of Annex I: 5 %; and
- where the reference obligation is one that if it gave rise to a direct exposure of the institution it would not be a qualifying item for the purposes of Annex I: 10 %.

However, in the case of a credit default swap, an institution the exposure of which arising from the swap represents a long position in the underlying shall be permitted to use a figure of 0 % for potential future credit exposure, unless the credit default swap is subject to closeout upon the insolvency of the entity the exposure of which 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 'n<sup>th</sup> to default' amongst a number of underlying obligations, which of the percentage figures prescribed above is to be applied is determined by the obligation with the n<sup>th</sup> lowest credit quality determined by whether it is one that if incurred by the institution would be a qualifying item for the purposes of Annex I.

- 8. For the purposes of point 6, in calculating risk-weighted exposure amounts institutions shall not be permitted to use the Financial Collateral Simple Method, set out in points 24 to 29, Part 3, Annex VIII to Directive 2006/48/EC, for the recognition of the effects of financial collateral.
- 9. For the purposes of point 6, in the case of repurchase transactions and securities or commodities lending or borrowing transactions booked in the trading book, all financial instruments and commodities that are eligible to be included in the trading

book may be recognised as eligible collateral. For exposures due to OTC derivative instruments booked in the trading book, commodities that are eligible to be included in the trading book may also be recognised as eligible collateral. For the purposes of calculating volatility adjustments where such financial instruments or commodities which are not eligible under Annex VIII of Directive 2006/48/EC are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise under such a transaction, and the institution is using the Supervisory volatility adjustments approach under Part 3 of Annex VIII to that Directive, such instruments and commodities shall be treated in the same way as non-main index equities listed on a recognised exchange.

Where institutions are using the Own Estimates of Volatility adjustments approach under Part 3 of Annex VIII to Directive 2006/48/EC in respect of financial instruments or commodities which are not eligible under Annex VIII of that Directive, volatility adjustments must be calculated for each individual item. Where institutions are using the Internal Models Approach defined in Part 3 of Annex VIII to Directive 2006/48/EC, they may also apply this approach in the trading book.

- 10. For the purposes of point 6, in relation to the recognition of master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions netting across positions in the trading book and the non-trading book will only be recognised when the netted transactions fulfil the following conditions:
- (a) all transactions are marked to market daily; and
- (b) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral under Title V, Chapter 2, Section 3, Subsection 3 of Directive 2006/48/EC without the application of point 9 of this Annex.
- Where a credit derivative included in the trading book forms part of an internal hedge and the credit protection is recognised under Directive 2006/48/EC, no counterparty risk shall be deemed to arise from the position in the credit derivative. Alternatively, an institution may consistently include for the purposes of calculating capital requirements for counterparty credit risk all credit derivatives included in the trading book forming part of internal hedges or purchased as protection against a CCR exposure where the credit protection is recognised under Directive 2006/48/EC.]
- 12. The capital requirement shall be 8 % of the total risk-weighted exposure amounts.

#### ANNEX III

# CALCULATING CAPITAL REQUIREMENTS FOR FOREIGN-EXCHANGE RISK

- 1. If the sum of an institution's overall net foreign-exchange position and its net gold position, calculated in accordance with the procedure set out in point 2, exceeds 2 % of its total own funds, it shall multiply the sum of its net foreign-exchange position and its net gold position by 8 % in order to calculate its own-funds requirement against foreign-exchange risk.
- 2. A two-stage calculation shall be used for capital requirements for foreign-exchange risk.

2.1. Firstly, the institution's net open position in each currency (including the reporting currency) and in gold shall be calculated.

This net open position shall consist of the sum of the following elements (positive or negative):

- (a) the net spot position (i.e. all asset items less all liability items, including accrued interest, in the currency in question or, for gold, the net spot position in gold);
- (b) the net forward position (i.e. all amounts to be received less all amounts to be paid under forward exchange and gold transactions, including currency and gold futures and the principal on currency swaps not included in the spot position);
- (c) irrevocable guarantees (and similar instruments) that are certain to be called and likely to be irrecoverable;
- (d) net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting institution and with the prior consent of the competent authorities, net future income/expenses not yet entered in accounting records but already fully hedged by forward foreign-exchange transactions may be included here). Such discretion must be exercised on a consistent basis;
- (e) the net delta (or delta-based) equivalent of the total book of foreign-currency and gold options; and
- (f) the market value of other (i.e. non-foreign-currency and non-gold) options.

Any positions which an institution has deliberately taken in order to hedge against the adverse effect of the exchange rate on its capital ratio may be excluded from the calculation of net open currency positions. Such positions should be of a non-trading or structural nature and their exclusion, and any variation of the terms of their exclusion, shall require the consent of the competent authorities. The same treatment subject to the same conditions as above may be applied to positions which an institution has which relate to items that are already deducted in the calculation of own funds.

For the purposes of the calculation referred to in the first paragraph, in respect of CIUs the actual foreign exchange positions of the CIU shall be taken into account. Institutions may rely on third party reporting of the foreign exchange positions in the CIU, where the correctness of this report is adequately ensured. If an institution is not aware of the foreign exchange positions in a CIU, it shall be assumed that the CIU is invested up to the maximum extent allowed under the CIU's mandate in foreign exchange and institutions shall, for trading book positions, take account of the maximum indirect exposure that they could achieve by taking leveraged positions through the CIU when calculating their capital requirement for foreign exchange risk. This shall be done by proportionally increasing the position in the CIU up to the maximum exposure to the underlying investment items resulting from the investment mandate. The assumed position of the CIU in foreign exchange shall be treated as a separate currency according to the treatment of investments in gold, subject to the modification that, if the direction of the CIU's investment is available, the total long position may be added to the total long open foreign exchange position and the total short position may be added to the total short open foreign exchange position. There would be no netting allowed between such positions prior to the calculation.

The competent authorities shall have the discretion to allow institutions to use the net present value when calculating the net open position in each currency and in gold.

2.2. Secondly, net short and long positions in each currency other than the reporting currency and the net long or short position in gold shall be converted at spot rates into the reporting currency. They shall then be summed separately to form the total of the

- net short positions and the total of the net long positions respectively. The higher of these two totals shall be the institution's overall net foreign-exchange position.
- 3. By derogation from points 1 and 2 and pending further coordination, the competent authorities may prescribe or allow institutions to use the following procedures for the purposes of this Annex.
- 3.1. The competent authorities may allow institutions to provide lower capital requirements against positions in closely correlated currencies than those which would result from applying points 1 and 2 to them. The competent authorities may deem a pair of currencies to be closely correlated only if the likelihood of a loss — calculated on the basis of daily exchange-rate data for the preceding three or five years — occurring on equal and opposite positions in such currencies over the following 10 working days, which is 4 % or less of the value of the matched position in question (valued in terms of the reporting currency) has a probability of at least 99 %, when an observation period of three years is used, or 95 %, when an observation period of five years is used. The own-funds requirement on the matched position in two closely correlated currencies shall be 4 % multiplied by the value of the matched position. The capital requirement on unmatched positions in closely correlated currencies, and all positions in other currencies, shall be 8 %, multiplied by the higher of the sum of the net short or the net long positions in those currencies after the removal of matched positions in closely correlated currencies.
- 3.2. The competent authorities may allow institutions to remove positions in any currency which is subject to a legally binding intergovernmental agreement to limit its variation relative to other currencies covered by the same agreement from whichever of the methods described in points 1, 2 and 3.1 that they apply. Institutions shall calculate their matched positions in such currencies and subject them to a capital requirement no lower than half of the maximum permissible variation laid down in the intergovernmental agreement in question in respect of the currencies concerned. Unmatched positions in those currencies shall be treated in the same way as other currencies.

By derogation from the first paragraph, the competent authorities may allow the capital requirement on the matched positions in currencies of Member States participating in the second stage of the economic and monetary union to be 1,6 %, multiplied by the value of such matched positions.

4. Net positions in composite currencies may be broken down into the component currencies according to the quotas in force.

#### ANNEX IV

## CALCULATING CAPITAL REQUIREMENTS FOR COMMODITIES RISK

- 1. Each position in commodities or commodity derivatives shall be expressed in terms of the standard unit of measurement. The spot price in each commodity shall be expressed in the reporting currency.
- 2. Positions in gold or gold derivatives shall be considered as being subject to foreign-exchange risk and treated according to Annex III or Annex V, as appropriate, for the purpose of calculating market risk.

- 3. For the purposes of this Annex, positions which are purely stock financing may be excluded from the commodities risk calculation only.
- 4. The interest-rate and foreign-exchange risks not covered by other provisions of this Annex shall be included in the calculation of general risk for traded debt instruments and in the calculation of foreign-exchange risk.
- 5. When the short position falls due before the long position, institutions shall also guard against the risk of a shortage of liquidity which may exist in some markets.
- 6. For the purpose of point 19, the excess of an institution's long (short) positions over its short (long) positions in the same commodity and identical commodity futures, options and warrants shall be its net position in each commodity.

The competent authorities shall allow positions in derivative instruments to be treated, as laid down in points 8, 9 and 10, as positions in the underlying commodity.

- 7. The competent authorities may regard the following positions as positions in the same commodity:
- (a) positions in different sub-categories of commodities in cases where the sub-categories are deliverable against each other; and
- (b) positions in similar commodities if they are close substitutes and if a minimum correlation of 0,9 between price movements can be clearly established over a minimum period of one year.

## Particular instruments

8. Commodity futures and forward commitments to buy or sell individual commodities shall be incorporated in the measurement system as notional amounts in terms of the standard unit of measurement and assigned a maturity with reference to expiry date.

The competent authorities may allow the capital requirement for an exchange-traded future to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the future and that it is at least equal to the capital requirement for a future that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V.

The competent authorities may also allow the capital requirement for an OTC commodity derivatives contract of the type referred to in this point cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the derivatives contract and that it is at least equal to the capital requirement for the contract in question that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V.

9. Commodity swaps where one side of the transaction is a fixed price and the other the current market price shall be incorporated into the maturity ladder approach, as set out in points 13 to 18, as a series of positions equal to the notional amount of the contract, with one position corresponding with each payment on the swap and slotted into the maturity ladder set out in Table 1 to point 13. The positions would be long positions if the institution is paying a fixed price and receiving a floating price and short positions if the institution is receiving a fixed price and paying a floating price.

Commodity swaps where the sides of the transaction are in different commodities are to be reported in the relevant reporting ladder for the maturity ladder approach.

10. Options on commodities or on commodity derivatives shall be treated as if they were positions equal in value to the amount of the underlying to which the option refers, multiplied by its delta for the purposes of this Annex. The latter positions may be netted off against any offsetting positions in the identical underlying commodity or commodity derivative. The delta used shall be that of the exchange concerned, that calculated by the competent authorities or, where none of those is available, or for OTC options, that calculated by the institution itself, subject to the competent authorities being satisfied that the model used by the institution is reasonable.

However, the competent authorities may also prescribe that institutions calculate their deltas using a methodology specified by the competent authorities.

Other risks, apart from the delta risk, associated with commodity options shall be safeguarded against.

The competent authorities may allow the requirement for a written exchange-traded commodity option to be equal to the margin required by the exchange if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement against an option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V.

The competent authorities may also allow the capital requirement for an OTC commodity option cleared by a clearing house recognised by them to be equal to the margin required by the clearing house if they are fully satisfied that it provides an accurate measure of the risk associated with the option and that it is at least equal to the capital requirement for an OTC option that would result from a calculation made using the method set out in the remainder of this Annex or applying the internal models method described in Annex V.

In addition they may allow the requirement on a bought exchange-traded or OTC commodity option to be the same as that for the commodity underlying it, subject to the constraint that the resulting requirement does not exceed the market value of the option. The requirement for a written OTC option shall be set in relation to the commodity underlying it.

- 11. Warrants relating to commodities shall be treated in the same way as commodity options referred to in point 10.
- 12. The transferor of commodities or guaranteed rights relating to title to commodities in a repurchase agreement and the lender of commodities in a commodities lending agreement shall include such commodities in the calculation of its capital requirement under this Annex.
- (a) Maturity ladder approach
- 13. The institution shall use a separate maturity ladder in line with Table 1 for each commodity. All positions in that commodity and all positions which are regarded as positions in the same commodity pursuant to point 7 shall be assigned to the appropriate maturity bands. Physical stocks shall be assigned to the first maturity band.

#### TABLE 1

Maturity band(1)	Spread rate (in %)(2)

$0 \le 1$ month	1,5
$> 1 \le 3$ months	1,5
$>$ 3 $\leq$ 6 months	1,5
$>$ 6 $\leq$ 12 months	1,5
$> 1 \le 2$ years	1,5
$> 2 \le 3$ years	1,5
> 3 years	1,5

- 14. Competent authorities may allow positions which are, or are regarded pursuant to point 7 as, positions in the same commodity to be offset and assigned to the appropriate maturity bands on a net basis for the following:
- (a) positions in contracts maturing on the same date; and
- (b) positions in contracts maturing within 10 days of each other if the contracts are traded on markets which have daily delivery dates.
- 15. The institution shall then calculate the sum of the long positions and the sum of the short positions in each maturity band. The amount of the former (latter) which are matched by the latter (former) in a given maturity band shall be the matched positions in that band, while the residual long or short position shall be the unmatched position for the same band.
- 16. That part of the unmatched long (short) position for a given maturity band that is matched by the unmatched short (long) position for a maturity band further out shall be the matched position between two maturity bands. That part of the unmatched long or unmatched short position that cannot be thus matched shall be the unmatched position.
- 17. The institution's capital requirement for each commodity shall be calculated on the basis of the relevant maturity ladder as the sum of the following:
- (a) the sum of the matched long and short positions, multiplied by the appropriate spread rate as indicated in the second column of Table 1 to point 13 for each maturity band and by the spot price for the commodity;
- (b) the matched position between two maturity bands for each maturity band into which an unmatched position is carried forward, multiplied by 0,6 % (carry rate) and by the spot price for the commodity; and
- (c) the residual unmatched positions, multiplied by 15 % (outright rate) and by the spot price for the commodity.
- 18. The institution's overall capital requirement for commodities risk shall be calculated as the sum of the capital requirements calculated for each commodity according to point 17.
- (b) Simplified approach
- 19. The institution's capital requirement for each commodity shall be calculated as the sum of:

- (a) 15 % of the net position, long or short, multiplied by the spot price for the commodity; and
- (b) 3 % of the gross position, long plus short, multiplied by the spot price for the commodity.
- 20. The institution's overall capital requirement for commodities risk shall be calculated as the sum of the capital requirements calculated for each commodity according to point 19.
- (c) Extended Maturity ladder approach
- 21. Competent authorities may authorise institutions to use the minimum spread, carry and outright rates set out in the following table (Table 2) instead of those indicated in points 13, 14, 17 and 18 provided that the institutions, in the opinion of their competent authorities:
- (a) undertake significant commodities business;
- (b) have a diversified commodities portfolio; and
- are not yet in a position to use internal models for the purpose of calculating the capital requirement on commodities risk in accordance with Annex V.

TABLE 2

	Precious metals (except gold)	Base metals	Agricultural products (softs)	Other, including energy products
Spread rate (%)	1,0	1,2	1,5	1,5
Carry rate (%)	0,3	0,5	0,6	0,6
Outright rate ( %)	8	10	12	15

#### ANNEX V

# USE OF INTERNAL MODELS TO CALCULATE CAPITAL REQUIREMENTS

- 1. The competent authorities may, subject to the conditions laid down in this Annex, allow institutions to calculate their capital requirements for position risk, foreign-exchange risk and/or commodities risk using their own internal risk-management models instead of or in combination with the methods described in Annexes I, III and IV. Explicit recognition by the competent authorities of the use of models for supervisory capital purposes shall be required in each case.
- 2. Recognition shall only be given if the competent authority is satisfied that the institution's risk-management system is conceptually sound and implemented with integrity and that, in particular, the following qualitative standards are met:

Document Generated: 2023-10-27

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- (a) the internal risk-measurement model is closely integrated into the daily risk-management process of the institution and serves as the basis for reporting risk exposures to senior management of the institution;
- (b) the institution has a risk control unit that is independent from business trading units and reports directly to senior management. The unit must be responsible for designing and implementing the institution's risk-management system. It shall produce and analyse daily reports on the output of the risk-measurement model and on the appropriate measures to be taken in terms of trading limits. The unit shall also conduct the initial and on-going validation of the internal model;
- (c) the institution's board of directors and senior management are actively involved in the risk-control process and the daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce both reductions of positions taken by individual traders as well as in the institution's overall risk exposure;
- (d) the institution has sufficient numbers of staff skilled in the use of sophisticated models in the trading, risk-control, audit and back-office areas;
- (e) the institution has established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of the risk-measurement system;
- (f) the institution's model has a proven track record of reasonable accuracy in measuring risks;
- (g) the institution frequently conducts a rigorous programme of stress testing and the results of these tests are reviewed by senior management and reflected in the policies and limits it sets. This process shall particularly address illiquidity of markets in stressed market conditions, concentration risk, one way markets, event and jump-to-default risks, non-linearity of products, deep out-of-the-money positions, positions subject to the gapping of prices and other risks that may not be captured appropriately in the internal models. The shocks applied shall reflect the nature of the portfolios and the time it could take to hedge out or manage risks under severe market conditions; and
- (h) the institution must conduct, as part of its regular internal auditing process, an independent review of its risk-measurement system.

The review referred to in point (h) of the first paragraph shall include both the activities of the business trading units and of the independent risk-control unit. At least once a year, the institution must conduct a review of its overall risk-management process.

The review shall consider the following:

- (a) the adequacy of the documentation of the risk-management system and process and the organisation of the risk-control unit;
- (b) the integration of market risk measures into daily risk management and the integrity of the management information system;
- (c) the process the institution employs for approving risk-pricing models and valuation systems that are used by front and back-office personnel;
- (d) the scope of market risks captured by the risk-measurement model and the validation of any significant changes in the risk-measurement process;

- (e) the accuracy and completeness of position data, the accuracy and appropriateness of volatility and correlation assumptions, and the accuracy of valuation and risk sensitivity calculations;
- (f) the verification process the institution employs to evaluate the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources; and
- (g) the verification process the institution uses to evaluate back-testing that is conducted to assess the models' accuracy.
- 3. Institutions shall have processes in place to ensure that their internal models have been adequately validated by suitably qualified parties independent of the development process to ensure that they are conceptually sound and adequately capture all material risks. The validation shall be conducted when the internal model is initially developed and when any significant changes are made to the internal model. The validation shall also be conducted on a periodic basis but especially where there have been any significant structural changes in the market or changes to the composition of the portfolio which might lead to the internal model no longer being adequate. As techniques and best practices evolve, institutions shall avail themselves of these advances. Internal model validation shall not be limited to back-testing, but shall, at a minimum, also include the following:
- (a) tests to demonstrate that any assumptions made within the internal model are appropriate and do not underestimate or overestimate the risk;
- (b) in addition to the regulatory back-testing programmes, institutions shall carry out their own internal model validation tests in relation to the risks and structures of their portfolios; and
- (c) the use of hypothetical portfolios to ensure that the internal model is able to account for particular structural features that may arise, for example material basis risks and concentration risk.
- 4. The institution shall monitor the accuracy and performance of its model by conducting a back-testing programme. The back-testing has to provide for each business day a comparison of the one-day value-at-risk measure generated by the institution's model for the portfolio's end-of-day positions to the one-day change of the portfolio's value by the end of the subsequent business day.

Competent authorities shall examine the institution's capability to perform back-testing on both actual and hypothetical changes in the portfolio's value. Back-testing on hypothetical changes in the portfolio's value is based on a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. Competent authorities shall require institutions to take appropriate measures to improve their back-testing programme if deemed deficient. Competent authorities may require institutions to perform back-testing on either hypothetical (using changes in portfolio value that would occur were end-of-day positions to remain unchanged), or actual trading (excluding fees, commissions, and net interest income) outcomes, or both.

- 5. For the purpose of calculating capital requirements for specific risk associated with traded debt and equity positions, the competent authorities may recognise the use of an institution's internal model if, in addition to compliance with the conditions in the remainder of this Annex, the internal model meets the following conditions:
- (a) it explains the historical price variation in the portfolio;

- (b) it captures concentration in terms of magnitude and changes of composition of the portfolio;
- (c) it is robust to an adverse environment;
- (d) it is validated through back-testing aimed at assessing whether specific risk is being accurately captured. If competent authorities allow this back-testing to be performed on the basis of relevant sub-portfolios, these must be chosen in a consistent manner;
- (e) it captures name-related basis risk, that is institutions shall demonstrate that the internal model is sensitive to material idiosyncratic differences between similar but not identical positions; and
- (f) it captures event risk.

The institution shall also meet the following conditions:

- where an institution is subject to event risk that is not reflected in its value-at-risk measure, because it is beyond the 10-day holding period and 99 percent confidence interval (low probability and high severity events), the institution shall ensure that the impact of such events is factored in to its internal capital assessment; and
- the institution's internal model shall conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model shall meet minimum data standards. Proxies shall be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

Further, as techniques and best practices evolve, institutions shall avail themselves of these advances.

In addition, the institution shall have an approach in place to capture, in the calculation of its capital requirements, the default risk of its trading book positions that is incremental to the default risk captured by the value-at-risk measure as specified in the previous requirements of this point. To avoid double counting, an institution may, when calculating its incremental default risk charge, take into account the extent to which default risk has already been incorporated into the value-at-risk measure, especially for risk positions that could and would be closed within 10 days in the event of adverse market conditions or other indications of deterioration in the credit environment. Where an institution captures its incremental default risk through a surcharge, it shall have in place methodologies for validating the measure.

The institution shall demonstrate that its approach meets soundness standards comparable to the approach set out in Articles 84 to 89 of Directive 2006/48/EC, under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality.

An institution that does not capture the incremental default risk through an internally developed approach shall calculate the surcharge through an approach consistent with the either the approach set out in Articles 78 to 83 of Directive 2006/48/EC or the approach set out in Articles 84 to 89 of that Directive.

With respect to cash or synthetic securitisation exposures that would be subject to a deduction treatment under the treatment set out in Article 66(2) of Directive 2006/48/EC, or risk-weighted at 1,250 % as set out in Part 4 of Annex IX to that Directive, these positions shall be subject to a capital charge that is no less than set forth under that treatment. Institutions that are dealers in these exposures may apply a different treatment where they can demonstrate to their competent authorities, in addition to trading intent, that a liquid two-way market exists for the securitisation exposures or, in the case of synthetic securitisations that rely solely on credit derivatives, for the

Document Generated: 2023-10-27

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

securitisation exposures themselves or all their constituent risk components. For the purposes of this section a two-way market is deemed to exist where there are independent good faith offers to buy and sell so that a price reasonably related to the last sales price or current good faith competitive bid and offer quotations can be determined within one day and settled at such a price within a relatively short time conforming to trade custom. For an institution to apply a different treatment, it shall have sufficient market data to ensure that it fully captures the concentrated default risk of these exposures in its internal approach for measuring the incremental default risk in accordance with the standards set out above.

- 6. Institutions using internal models which are not recognised in accordance with point 4 shall be subject to a separate capital charge for specific risk as calculated according to Annex I.
- 7. For the purposes of point 9(b), the results of the institution's own calculation shall be scaled up by a multiplication factor of at least 3.
- 8. The multiplication factor shall be increased by a plus-factor of between 0 and 1 in accordance with Table 1, depending on the number of overshootings for the most recent 250 business days as evidenced by the institution's back-testing. Competent authorities shall require the institutions to calculate overshootings consistently on the basis of back-testing either on actual or on hypothetical changes in the portfolio's value. An overshooting is a one-day change in the portfolio's value that exceeds the related one-day value-at-risk measure generated by the institution's model. For the purpose of determining the plus-factor the number of overshootings shall be assessed at least quarterly.

TABLE 1

Number of overshootings	Plus-factor	
Fewer than 5	0,0	
5	0,4	
6	0,5	
7	0,65	
8	0,75	
9	0,85	
10 or more	1,0	

The competent authorities may, in individual cases and owing to an exceptional situation, waive the requirement to increase the multiplication factor by the 'plus-factor' in accordance with Table 1, if the institution has demonstrated to the satisfaction of the competent authorities that such an increase is unjustified and that the model is basically sound.

If numerous overshootings indicate that the model is not sufficiently accurate, the competent authorities shall revoke the model's recognition or impose appropriate measures to ensure that the model is improved promptly.

In order to allow competent authorities to monitor the appropriateness of the plus-factor on an ongoing basis, institutions shall notify promptly, and in any case no later than within five working days, the competent authorities of overshootings that result form their back-testing programme and that would according to the above table imply an increase of a plus-factor.

- 9. Each institution must meet a capital requirement expressed as the higher of:
- (a) its previous day's value-at-risk measure according to the parameters specified in this Annex plus, where appropriate, the incremental default risk charge required under point 5; or
- (b) an average of the daily value-at-risk measures on each of the preceding 60 business days, multiplied by the factor mentioned in point 7, adjusted by the factor referred to in point 8 plus, where appropriate, the incremental default risk charge required under point 5.
- 10. The calculation of the value-at-risk measure shall be subject to the following minimum standards:
- (a) at least daily calculation of the value-at-risk measure;
- (b) a 99th percentile, one-tailed confidence interval;
- (c) a 10-day equivalent holding period;
- (d) an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility; and
- (e) three-monthly data set updates.
- 11. The competent authorities shall require that the model captures accurately all the material price risks of options or option-like positions and that any other risks not captured by the model are covered adequately by own funds.
- 12. The risk-measurement model shall capture a sufficient number of risk factors, depending on the level of activity of the institution in the respective markets and in particular the following.

Interest rate risk

The risk-measurement system shall incorporate a set of risk factors corresponding to the interest rates in each currency in which the institution has interest rate sensitive on- or off-balance sheet positions. The institution shall model the yield curves using one of the generally accepted approaches. For material exposures to interest-rate risk in the major currencies and markets, the yield curve shall be divided into a minimum of six maturity segments, to capture the variations of volatility of rates along the yield curve. The risk-measurement system must also capture the risk of less than perfectly correlated movements between different yield curves. Foreign-exchange risk

The risk-measurement system shall incorporate risk factors corresponding to gold and to the individual foreign currencies in which the institution's positions are denominated.

For CIUs the actual foreign exchange positions of the CIU shall be taken into account. Institutions may rely on third party reporting of the foreign exchange position of the CIU, where the correctness of this report is adequately ensured. If an institution is not aware of the foreign exchange positions of a CIU, this position should be carved out and treated in accordance with the fourth paragraph of point 2.1 of Annex III. Equity risk

The risk-measurement system shall use a separate risk factor at least for each of the equity markets in which the institution holds significant positions.

Commodity risk

The risk-measurement system shall use a separate risk factor at least for each commodity in which the institution holds significant positions. The risk-measurement system must also capture the risk of less than perfectly correlated movements between similar, but not identical, commodities and the exposure to changes in forward prices arising from maturity mismatches. It shall also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions.

13. The competent authorities may allow institutions to use empirical correlations within risk categories and across risk categories if they are satisfied that the institution's system for measuring correlations is sound and implemented with integrity.

#### ANNEX VI

## CALCULATING CAPITAL REQUIREMENTS FOR LARGE EXPOSURES

- 1. The excess referred to in Article 31(b) shall be calculated by selecting those components of the total trading exposure to the client or group of clients in question which attract the highest specific-risk requirements in Annex I and/or requirements in Annex II, the sum of which equals the amount of the excess referred to in Article 31(a).
- 2. Where the excess has not persisted for more than 10 days, the additional capital requirement shall be 200 % of the requirements referred to in point 1, on these components.
- 3. As from 10 days after the excess has occurred, the components of the excess, selected in accordance with point 1, shall be allocated to the appropriate line in column 1 of Table 1 in ascending order of specific-risk requirements in Annex I and/or requirements in Annex II. The additional capital requirement shall be equal to the sum of the specific-risk requirements in Annex I and/or the Annex II requirements on these components, multiplied by the corresponding factor in column 2 of Table 1.

TABLE 1

Excess over the limits(on the basis of a percentage of own funds)	Factors
Up to 40 %	200 %
From 40 % to 60 %	300 %
From 60 % to 80 %	400 %
From 80 % to 100 %	500 %
From 100 % to 250 %	600 %
Over 250 %	900 %

#### ANNEX VII

#### **TRADING**

#### PART A

#### **Trading Intent**

- 1. Positions/portfolios held with trading intent shall comply with the following requirements:
- (a) there must be a clearly documented trading strategy for the position/instrument or portfolios, approved by senior management, which shall include expected holding horizon;
- (b) there must be clearly defined policies and procedures for the active management of the position, which shall include the following:
  - (i) positions entered into on a trading desk;
  - (ii) position limits are set and monitored for appropriateness;
  - (iii) dealers have the autonomy to enter into/manage the position within agreed limits and according to the approved strategy;
  - (iv) positions are reported to senior management as an integral part of the institution's risk management process; and
  - (v) positions are actively monitored with reference to market information sources and an assessment made of the marketability or hedge-ability of the position or its component risks, including the assessment of, the quality and availability of market inputs to the valuation process, level of market turnover, sizes of positions traded in the market; and
- (c) there must be clearly defined policy and procedures to monitor the position against the institution's trading strategy including the monitoring of turnover and stale positions in the institution's trading book.

# PART B

# **Systems and Controls**

- 1. Institutions shall establish and maintain systems and controls sufficient to provide prudent and reliable valuation estimates.
- 2. Systems and controls shall include at least the following elements:
- (a) documented policies and procedures for the process of valuation. This includes clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, month end and ad-hoc verification procedures; and
- (b) reporting lines for the department accountable for the valuation process that are clear and independent of the front office.

The reporting line shall ultimately be to a main board executive director. Prudent Valuation Methods

- 3. Marking to market is the at least daily valuation of positions at readily available close out prices that are sourced independently. Examples include exchange prices, screen prices, or quotes from several independent reputable brokers.
- 4. When marking to market, the more prudent side of bid/offer shall be used unless the institution is a significant market maker in the particular type of financial instrument or commodity in question and it can close out at mid market.
- 5. Where marking to market is not possible, institutions must mark to model their positions/portfolios before applying trading book capital treatment. Marking to model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input.
- 6. The following requirements must be complied with when marking to model:
- senior management shall be aware of the elements of the trading book which are subject to mark to model and shall understand the materiality of the uncertainty this creates in the reporting of the risk/performance of the business;
- (b) market inputs shall be sourced, where possible, in line with market prices, and the appropriateness of the market inputs of the particular position being valued and the parameters of the model shall be assessed on a frequent basis;
- (c) where available, valuation methodologies which are accepted market practice for particular financial instruments or commodities shall be used;
- (d) where the model is developed by the institution itself, it shall be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process;
- (e) there shall be formal change control procedures in place and a secure copy of the model shall be held and periodically used to check valuations;
- (f) risk management shall be aware of the weaknesses of the models used and how best to reflect those in the valuation output; and
- (g) the model shall be subject to periodic review to determine the accuracy of its performance (e.g. assessing the continued appropriateness of assumptions, analysis of profit and loss versus risk factors, comparison of actual close out values to model outputs).

For the purposes of point (d), the model shall be developed or approved independently of the front office and shall be independently tested, including validation of the mathematics, assumptions and software implementation.

7. Independent price verification should be performed in addition to daily marking to market or marking to model. This is the process by which market prices or model inputs are regularly verified for accuracy and independence. While daily marking to market may be performed by dealers, verification of market prices and model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). Where independent pricing sources are not available or pricing sources are more subjective, prudent measures such as valuation adjustments may be appropriate.

Valuation adjustments or reserves

8. Institutions shall establish and maintain procedures for considering valuation adjustments/reserves.

General standards

9. The competent authorities shall require the following valuation adjustments/reserves to be formally considered: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, future administrative costs and, where relevant, model risk.

Standards for less liquid positions

- 10. Less liquid positions could arise from both market events and institution-related situations e.g. concentrated positions and/or stale positions.
- 11. Institutions shall consider several factors when determining whether a valuation reserve is necessary for less liquid positions. These factors include the amount of time it would take to hedge out the position/risks within the position, the volatility and average of bid/offer spreads, the availability of market quotes (number and identity of market makers) and the volatility and average of trading volumes, market concentrations, the aging of positions, the extent to which valuation relies on marking-to-model, and the impact of other model risks.
- 12. When using third party valuations or marking to model, institutions shall consider whether to apply a valuation adjustment. In addition, institutions shall consider the need for establishing reserves for less liquid positions and on an ongoing basis review their continued suitability.
- When valuation adjustments/reserves give rise to material losses of the current financial year, these shall be deducted from an institution's original own funds according to point (k) of Article 57 of Directive 2006/48/EC
- 14. Other profits/losses originating from valuation adjustments/reserves shall be included in the calculation of 'net trading book profits' mentioned in point (b) of Article 13(2) and be added to/deducted from the additional own funds eligible to cover market risk requirements according to such provisions.
- 15. Valuation adjustments/reserves which exceed those made under the accounting framework to which the institution is subject shall be treated in accordance with point 13 if they give rise to material losses, or point 14 otherwise.

## PART C

#### **Internal Hedges**

- 1. An internal hedge is a position that materially or completely offsets the component risk element of a non-trading book position or a set of positions. Positions arising from internal hedges are eligible for trading book capital treatment, provided that they are held with trading intent and that the general criteria on trading intent and prudent valuation specified in Parts A and B are met. In particular:
- (a) internal hedges shall not be primarily intended to avoid or reduce capital requirements;
- (b) internal hedges shall be properly documented and subject to particular internal approval and audit procedures;
- (c) the internal transaction shall be dealt with at market conditions;

- (d) the bulk of the market risk that is generated by the internal hedge shall be dynamically managed in the trading book within the authorised limits; and
- (e) internal transactions shall be carefully monitored.

Monitoring must be ensured by adequate procedures.

- 2. The treatment referred to in point 1 applies without prejudice to the capital requirements applicable to the 'non-trading book leg' of the internal hedge.
- [F13. By way of derogation from points 1 and 2, when an institution hedges a non-trading book credit risk exposure using a credit derivative booked in its trading book (using an internal hedge), the non-trading book exposure shall not be deemed to be hedged for the purposes of calculating capital requirements unless the institution purchases from an eligible third party protection provider a credit derivative meeting the requirements set out in point 19 of Part 2 of Annex VIII to Directive 2006/48/EC with regard to the non-trading book exposure. Without prejudice to the second sentence of point 11 in Annex II, where such third party protection is purchased and recognised as a hedge of a non-trading book exposure for the purposes of calculating capital requirements, neither the internal nor external credit derivative hedge shall be included in the trading book for the purposes of calculating capital requirements.]

#### PART D

## **Inclusion In The Trading Book**

- 1. Institutions shall have clearly defined policies and procedures for determining which position to include in the trading book for the purposes of calculating their capital requirements, consistent with the criteria set out in Article 11 and taking into account the institution's risk management capabilities and practices. Compliance with these policies and procedures shall be fully documented and subject to periodic internal audit.
- 2. Institutions shall have clearly defined policies and procedures for overall management of the trading book. At a minimum these policies and procedures shall address:
- (a) the activities the institution considers to be trading and as constituting part of the trading book for capital requirement purposes;
- (b) the extent to which a position can be marked-to-market daily by reference to an active, liquid two-way market;
- (c) for positions that are marked-to-model, the extent to which the institution can:
  - (i) identify all material risks of the position;
  - (ii) hedge all material risks of the position with instruments for which an active, liquid two-way market exists; and
  - (iii) derive reliable estimates for the key assumptions and parameters used in the model:
- (d) the extent to which the institution can, and is required to, generate valuations for the position that can be validated externally in a consistent manner;

- (e) the extent to which legal restrictions or other operational requirements would impede the institution's ability to effect a liquidation or hedge of the position in the short term;
- (f) the extent to which the institution can, and is required to, actively risk manage the position within its trading operation; and
- (g) the extent to which the institution may transfer risk or positions between the non-trading and trading books and the criteria for such transfers.
- 3. Competent authorities may allow institutions to treat positions that are holdings in the trading book as set out in Article 57(l), (m) and (n) of Directive 2006/48/EC as equity or debt instruments, as appropriate, where an institution demonstrates that it is an active market maker in these positions. In this case, the institution shall have adequate systems and controls surrounding the trading of eligible own funds instruments.
- 4. Term trading-related repo-style transactions that an institution accounts for in its non-trading book may be included in the trading book for capital requirement purposes so long as all such repo-style transactions are included. For this purpose, trading-related repo-style transactions are defined as those that meet the requirements of Article 11(2) and of Annex VII, Part A, and both legs are in the form of either cash or securities includable in the trading book. Regardless of where they are booked, all repo-style transactions are subject to a non-trading book counterparty credit risk charge.

#### ANNEX VIII

# REPEALED DIRECTIVES

## PART A

Repealed (referred to in Article 52) directives together with their successive amendments

Council Directive 93/6/EEC of 15 March 1993 on the capital adequacy of investments firms and credit institutions

Directive 98/31/EC of the European Parliament and of the Council of 22 June 1998 amending Council Directive 93/6/EEC on the capital adequacy of investment firms and credit institutions

Directive 98/33/EC of the European Parliament and of the Council of 22 June 1998 amending Article 12 of Council Directive 77/780/EEC on the taking up and pursuit of the business of credit institutions, Articles 2, 5, 6, 7, 8 of and Annexes II and III to Council Directive 89/647/EEC on a solvency ratio for credit institutions and Article 2 of and Annex II to Council Directive 93/6/EEC on the capital adequacy of investment firms and credit institutions

Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC,

Document Generated: 2023-10-27

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council:

Only Article 26

Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC:

Only Article 67

# PART B

Deadlines(referred to in Article 52) for transposition

Directive	Deadline for transposition
Council Directive 93/6/EEC	1.7.1995
Directive 98/31/EC	21.7.2000
Directive 98/33/EC	21.7.2000
Directive 2002/87/EC	11.8.2004
Directive 2004/39/EC	30.4.2006/31.1.2007
Directive 2005/1/EC	13.5.2005

## ANNEX IX

# **CORRELATION TABLE**

This Directive	Directive 93/6/EEC	Directive 98/31/EC	Directive 98/33/EC	Directive 2002/87/EC	Directive 2004/39/EC
Article 1(1) first sentence					
Article 1(1) second sentence and (2)	Article 1				
Article 2(1)					
Article 2(2)	Article 7(3)				
Article 3(1) (a)	Article 2(1)				
Article 3(1) (b)	Article 2(2)				Article 67(1)

ANNEA VIII FART B
Document Generated: 2023-10-27

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After
IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

Article 3(1) (c) to (e)	Article 2(3) to (5)				
Article 3(1)(f) and (g)					
Article 3(1) (h)	Article 2(10)				
Article 3(1)(i)	Article 2(11)		Article 3(1)		
Article 3(1)(j)	Article 2(14)				
Article 3(1) (k) and (l)	Article 2(15) and (16)	Article 1(1) (b)			
Article 3(1) (m)	Article 2(17)	Article 1(1) (c)			
Article 3(1) (n)	Article 2(18)	Article 1(1) (d)			
Article 3(1) (o) to (q)	Article 2(19) to (21)				
Article 3(1)(r)	Article 2(23)				
Article 3(1) (s)	Article 2(26)				
Article 3(2)	Article 2(7) and (8)				
Article 3(3) (a) and (b)	Article 7(3)			Article 26	
Article 3(3) (c)	Article 7(3)				
Article 4	Article 2(24)				
Article 5	Article 3(1) and (2)				
Article 6	Article 3(4)				Article 67(2)
Article 7	Article 3(4a)				Article 67(3)
Article 8	Article 3(4b)				Article 67(3)
Article 9	Article 3(3)				
Article 10	Article 3(5) to (8)				
Article 11	Article 2(6)				
Article 12 first paragraph	Article 2(25)				

Document Generated: 2023-10-27

**Status:** EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

Article 12 second paragraph				
Article 13(1) first sub-paragraph	Annex V(1) first sub- paragraph			
Article 13(1) second sub- paragraph and (2) to (5)	Annex V(1) second sub- paragraph and (2) to (5)	Article 1(7) and Annex 4(a)(b)		
Article 14	Annex V(6) and (7)	Annex 4(c)		
Article 15	Annex V(8)			
Article 16	Annex V(9)			
Article 17				
Article 18(1) first sub- paragraph	Article 4(1) first sub- paragraph			
Article 18(1) (a) and (b)	Article 4(1)(i) and (ii)	Article 1(2)		
Article 18(2) to (4)	Article 4(6) to (8)			
Article 19(1)				
Article 19(2)	Article 11(2)			
Article 19(3)				
Article 20				
Article 21	Annex IV			
Article 22				
Article 23 first and second paragraph	Article 7(5) and (6)			
Article 23 third paragraph				
Article 24				
Article 25				
Article 26(1)	Article 7(10)	Article 1(4)		
Article 26(2) to (4)	Article 7(11) to (13)			

Article 27	Article 7(14) and (15)			
Article 28(1)	Article 5(1)			
Article 28(2)	Article 5(2)	Article 1(3)		
Article 28(3)				
Article 29(1) (a) to (c) and next two sub- paragraphs	Annex VI(2)			
Article 29(1) last sub- paragraph				
Article 29(2)	Annex VI(3)			
Article 30(1) and (2) first sub-paragraph	Annex VI(4) and (5)			
Article 30(2) second sub-paragraph				
Article 30(3) and (4)	Annex VI(6) and (7)			
Article 31	Annex VI(8) (1), (2) first sentence, (3) to (5)			
Article 32	Annex VI(9) and (10)			
Article 33(1) and (2)				
Article 33(3)	Article 6(2)			
Article 34				
Article 35(1) to (4)	Article 8(1) to (4)			
Article 35(5)	Article 8(5) first sentence	Article 1(5)		
Article 36	Article 9(1) to (3)			
Article 37				
Article 38	Article 9(4)			
Article 39				
Article 40	Article 2(9)			

Document Generated: 2023-10-27

**Status:** EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

	1		1	,
Article 41(1) (a) to (c)	Article 10 first, second and third indents			
Article 41(1) (d) and (e)				
Article 41(1) (f)	Article 10 fourth indent			
Article 41(1) (g)				
Article 42				
Article 43				
Article 44				
Article 45				
Article 46	Article 12			
Article 47				
Article 48				
Article 49				
Article 50	Article 15			
Annex I(1) to (4)	Annex I(1) to (4)			
Annex I(4) last paragraph	Article 2(22)			
Annex I(5) to (7)	Annex I(5) to (7)			
Annex I(8)				
Annex I(9) to (11)	Annex I(8) to (10)			
Annex I(12) to (14)	Annex I(12) to (14)			
Annex I(15) and (16)	Article 2(12)			
Annex I(17) to (41)	Annex I(15) to (39)			
Annex I(42) to (56)				
Annex II(1) and (2)	Annex II(1) and (2)			
Annex II(3) to (10)				

	T	Γ	I	T	T
Annex III(1)	Annex III(1) first sub- paragraph	Article 1(7) and Annex 3(a)			
Annex III(2)	Annex III(2)	Timex 5(u)			
	` ′	Article 1(7)			
Annex III(2.1) first to third paragraphs	Annex III(3.1)	Article 1(7) and Annex 3(b)			
Annex III(2.1) fourth paragraph					
Annex III(2.1) fifth paragraph	Annex III(3.2)	Article 1(7) and Annex 3(b)			
Annex III(2.2), (3), (3.1)	Annex III(4) to (6)	Article 1(7) and Annex 3(c)			
Annex III(3.2)	Annex III(8)				
Annex III(4)	Annex III(11)				
Annex IV(1) to (20)	Annex VII(1) to (20)	Article 1(7) and Annex 5			
Annex IV(21)	Article 11a	Article 1(6)			
Annex V(1) to (12) fourth paragraph	Annex VIII(1) to (13)(ii)	Article 1(7) and Annex 5			
Annex V(12) fifth paragraph					
Annex V(12) sixth paragraph to (13)	Annex VIII(13 (iii) to (14)	)Article 1(7) and Annex 5			
Annex VI	Annex VI(8) (2) after the first sentence				
Annex VII					
Annex VIII					
Annex IX					
			•		•