

ANNEXURE 1 COUNTERPARTY RISK REQUIREMENT

1 COUNTERPARTY RISK REQUIREMENT

1.1 Nature of counterparty risk amount

For each type of counterparty risk that gives rise to a Positive Credit Exposure, a counterparty risk amount:

- (a) must be calculated in accordance with the methods set out in this Annexure 1; and
- (b) may be reduced by a counterparty risk weighting in accordance with clause 8 of this Annexure 1.

Introduced 11/03/04

1.2 Overview

There are separate methods for measuring counterparty risk amounts for each of the following transaction types:

Transaction Type			
Non Margined Financial Instrument	Free Delivery		Securities Lending and Borrowing
Margined Financial Instrument	OTC Derivative or a Warrant held as principal	Sub-Underwritten Position	

Introduced 11/03/04

2 NON-MARGINED FINANCIAL INSTRUMENTS METHOD

- (a) For unsettled trades in Financial Instruments which are not margined and not covered by one of the other methods in this Annexure, and for unsettled trades in margined Equities, Debt Instruments and warrants, the counterparty risk amount is 3% of the Client Balance, where this balance does not include trades which remain unsettled with the Counterparty for greater than 10 Business Days following the transaction date.

A Participant may reduce the Client Balance by the amount of Financial Instruments held by the Participant on behalf of the Counterparty if they specifically relate to the sale trades pending settlement with the market or by the amount of collateral held by the Participant on behalf of the specific Counterparty if the collateral is Liquid, valued at the mark to market value and the collateral arrangement is evidenced in writing between the Participant and the Counterparty.

- (b) For unsettled trades in Financial Instruments which are not margined and not covered by one of the other methods in this Annexure, and for unsettled trades in margined Equities, Debt Instruments and warrants, the counterparty risk amount for trades remaining unsettled for greater than 10 Business Days following the transaction date is at the choice of the Participant:
- (i) either:
 - A. 3% of the contract value; or
 - B. the excess of:
 - I. the contract value over the market value of each Financial Instrument in the case of a client purchase; and
 - II. the market value of each Financial Instrument over the contract value in the case of a client sale,whichever is the greater; or
 - (ii) 100% of the contract value for a client purchase or 100% of the market value for a client sale.

A Participant may reduce the contract values and the excesses by the amount of collateral held by the Participant on behalf of the Counterparty if the collateral is Liquid, valued at the mark to market value or another value approved by ASX Clear and the collateral arrangement is evidenced in writing between the Participant and Counterparty.

- (c) A Participant need not include credit amounts included in a Client Balance where such amounts represent an amount of cash held in the Participant's trust and/or segregated account.
- (d) This method does not apply to OTC Derivatives but does apply to warrants which also may be covered by the method in clause 6.

Introduced 11/03/04, 07/06/13

3 FREE DELIVERY METHOD

For a Free Delivery in a Financial Instrument, the counterparty risk amount for the Counterparty is:

- (a) 8% of that part of the contract value subject to a Free Delivery, where payment or delivery of the Financial Instrument which is the subject of a Free Delivery remains outstanding for less than 2 Business Days following the settlement date; and
- (b) 100% of that part of the contract value subject to a Free Delivery, where payment or delivery of the Financial Instrument remains outstanding for greater than 2 Business Days following the settlement date.

A Participant may reduce the contract value by the amount of collateral held by the Participant on behalf of the Counterparty if the collateral is Liquid, valued at the mark to market value or another value approved by ASX Clear and the collateral arrangement is evidenced in writing between the Participant and Counterparty.

Introduced 11/03/04

4 SECURITIES LENDING AND BORROWING METHOD

For the purposes of this clause, counterparty exposure means the amount by which the market value of Equity or Debt Instruments or cash given by the Participant to the Counterparty exceeds the market value of Equity or Debt Instruments or cash received by the Participant from the Counterparty.

Counterparty exposure may be calculated on a net basis where the relevant transactions are subject to a written agreement that supports netting across different transactions.

For a Securities Lending and Borrowing transaction, the counterparty risk amount for a Counterparty, from the transaction date is:

- (a) zero, if across all Counterparties to Securities Lending and Borrowing transactions, the sum of each counterparty exposure is less than or equal to \$10,000; or
- (b) (i) 8% of the counterparty exposure , where:
 - A. the Securities Lending and Borrowing is subject to a written agreement that supports netting across different transactions; and
 - B. the value of the counterparty exposure is less than or equal to 15% of the market value of Equity or Debt Instruments or cash received by the Participant from the Counterparty; or
- (ii) 8% of the amount equivalent to 15% of the market value of the Equity or Debt Instruments or cash received by the Participant from the Counterparty plus 100% of the amount of the difference between the counterparty exposure and 15% of the market value of Equity or Debt Instruments or cash received by the Participant from the Counterparty, where:
 - A. the Securities Lending and Borrowing is subject to a written agreement that supports netting across different transactions; and
 - B. the value of the counterparty exposure is greater than 15% of the market value of the Equity or Debt Instruments or cash received by the Participant from the Counterparty ;
- (c) 100% of the counterparty exposure, if:

- (i) clause 4(a) and clause 4(b) do not apply; or
- (ii) if clause 4(b) does apply but the Participant elects to calculate the amount under clause 4(c).

Introduced 11/03/04

5 MARGINED FINANCIAL INSTRUMENTS METHOD

For trades in Financial Instruments which are margined, other than unsettled trades in margined Equities, Debt Instruments and warrants, the counterparty risk amount for a Counterparty:

- (a) is the full value of the outstanding settlement amount, premium, deposit or margin call that the Counterparty is required to pay to the Participant, regardless of whether or not the Participant is required to pay that amount to an exchange, clearing house or other entity;
- (b) is the full value of the outstanding settlement amount, premium, deposit or margin call that is due from an entity with respect to client or house trades cleared by that entity;
- (c) commences at the time that amounts are normally scheduled for payment to the relevant exchange or clearing house.

A Participant may reduce the unpaid settlement amount, premium, deposit or margin call by the amount of cash paid by the Counterparty or collateral held by the Participant on behalf of the Counterparty if the collateral is Liquid, valued at the mark to market value or another value approved by ASX Clear and the collateral arrangement is evidenced in writing between the Participant and Counterparty.

Introduced 11/03/04, 07/06/13

6 OTC DERIVATIVES AND WARRANTS EXECUTED AS PRINCIPAL METHOD

For an OTC Derivative or warrant held as principal, the counterparty risk amount for a Counterparty is:

- (a) zero, for a written Option position where the premium due has been received;
- (b) 100% of the premium for a written Option position where the premium due has not been received; and
- (c) otherwise, 8% of the aggregate of the credit equivalent amount which is calculated as the sum of:
 - (i) a current credit exposure being the mark to market valuation of all contracts with a Positive Credit Exposure; and
 - (ii) a potential credit exposure being the product of the absolute value of a contract's nominal, notional or actual principal amount and the

applicable potential credit exposure factor specified in Table 2.2, Annexure 5.

A Participant may reduce the premium or credit equivalent amount by the amount of collateral held by the Participant on behalf of the Counterparty if the collateral is Liquid, valued at the mark to market value or another value approved by ASX Clear and the collateral arrangement is evidenced in writing between the Participant and Counterparty.

Introduced 11/03/04

7 SUB-UNDERWRITTEN POSITIONS METHOD

This clause and Annexure 4 will be inserted and effective on a date to be advised.

Introduced 11/03/04

8 COUNTERPARTY RISK WEIGHTING

- (a) Subject to clause 8(b), a Participant may choose to calculate its counterparty risk amount in relation to a Counterparty as the counterparty risk amount calculated in accordance with clauses 2 to 7 multiplied by:
 - (i) the counterparty risk weighting applicable for that Counterparty specified in Table 2.1, Annexure 5.
- (b) A Participant can only calculate its counterparty risk amount for a Counterparty in accordance with clause 8(a) above if it calculates the counterparty risk amount in this manner for that Counterparty consistently across all methods within Annexure 1.

Introduced 11/03/04

ANNEXURE 2 LARGE EXPOSURE RISK REQUIREMENT

1 COUNTERPARTY LARGE EXPOSURE RISK REQUIREMENT

1.1 Nature of counterparty large exposure risk amount

The counterparty large exposure risk amount is the absolute sum of the individual counterparty large exposure risk amounts calculated using the method of calculation set out in this Annexure 2.

Introduced 11/03/04

1.2 Method

- (a) The counterparty large exposure amount is:
- (i) zero, if there are no exposures to a Counterparty in respect of transactions at the times specified in Table 1;
 - (ii) zero, if there are aggregate exposures to a Counterparty in respect of transactions at the times specified in Table 1 and where these aggregate exposures are less than or equal to 10% of the Participant's Liquid Capital; or
 - (iii) 100% of the counterparty risk amount for the exposure calculated in accordance with Annexure 1, if there are aggregate exposures to a Counterparty in respect of transactions at the times specified in Table 1 and where these aggregate exposures are greater than 10% of the Participant's Liquid Capital.

Table 1

Transaction Type	Subject to counterparty large exposure	Time of Exposure	Reference in Annexure 1
Non Margined Financial Instrument	Yes	Greater than 10 Business Days after transaction date	Clause 2(b)
Free Delivery	No	N/A	N/A
Securities Lending and Borrowing	Yes	Date the transaction is due to be closed out	Clause 4
Margined Financial Instrument	Yes	24 hours after the time that amounts are normally scheduled for payment to the relevant exchange or clearing house	Clause 5
OTC Derivative or Warrant held as principal	Yes	Date any payment or delivery is due under the transaction	Clause 6
Sub – Underwritten Positions	No	N/A	N/A

- (b) The counterparty large exposure risk amount calculated in respect of a transaction cannot exceed the maximum loss for that transaction.
- (c) To calculate aggregate exposures to a Counterparty, a Participant must:
 - (i) aggregate exposures to persons forming part of a Group Of Connected Persons; and
 - (ii) not include exposures other than Positive Credit Exposures specified in Table 1.

Introduced 11/03/04

2. ISSUER LARGE EXPOSURE RISK REQUIREMENT

2.1 Nature of an issuer large exposure risk amount

The issuer large exposure risk amount is the absolute sum of the individual issuer large exposure risk amounts calculated from the transaction date using the method of calculation set out in this Annexure 2.

Introduced 11/03/04

2.2 Overview

- (a) The issuer large exposure risk amount for an issuer is subject to two tests, measuring the net position relative to Liquid Capital and relative to the issuer.
- (b) In calculating the issuer large exposure amounts for exposures to:
 - (i) equity positions, the method set out in clause 3 applies;
 - (ii) debt positions, the method set out in clause 4 applies; and
 - (iii) both equity positions and debt positions where no risk amount arises under clause 3 or clause 4, the method set out in clause 5 applies.
- (c) The methods referred to in clause 2.2(b) are summarised in the Tables below:

Table 2

	Equity Method				Risk amount
	Compared to Liquid Capital		Compared to Issue		
Equity Net Position from transaction date	If equity net position is ≤25%, is a risk amount required? No	If equity net position is >25%, is a risk amount required? Yes (a)	If equity net position is ≤5%, is a risk amount required? No	If equity net position is >5%, is a risk amount required? Yes (b)	Take the greater of (a) and (b)

Table 3

	Debt Method				Risk amount
	Compared to Liquid Capital		Compared to Issue		
Debt Net Position from transaction date	If debt net position is $\leq 25\%$, is a risk amount required? No	If debt net position is $> 25\%$, is a risk amount required? Yes (a)	If debt net position is $\leq 10\%$, is a risk amount required? No	If debt net position is $> 10\%$, is a risk amount required? Yes (b)	Take the greater of (a) and (b)

Table 4

	Equity and Debt Method		Risk amount
	Compared to Liquid Capital only		
Equity Net Position and Debt Net Position from transaction date	If equity net position and debt net position is $\leq 25\%$, is a risk amount required? No	If equity net position and debt net position is $> 25\%$, is a risk amount required? Yes (c), but only if a zero amount has been calculated in Table 2 or Table 3	Take (c)

Introduced 11/03/04

2.3 Application

- (a) An issuer large exposure risk amount does not arise in relation to:
- (i) a Financial Instrument whose value is based on Government Debt Instrument or an interest rate;
 - (ii) a Forward Rate Agreement;
 - (iii) an interest rate or currency Swap;
 - (iv) an interest rate leg of an equity Swap; and
 - (v) a Future on an index, an equity Swap based on an index or any other index-linked Derivative where that Future, equity Swap or index-linked Derivative is not broken down into its constituent positions by a Participant for the purposes of calculating a position risk amount.
- (b) An issuer large exposure risk amount must be calculated in the following manner:
- (i) the Equity leg of an equity Swap the value of which is based on the change in value of an individual Equity is treated as an exposure to the

issuer of the Equity for the face value of the equity leg of the equity Swap;

- (ii) a Future or forward contract over:
 - (A) a Debt Instrument other than a Government Debt Instrument; or
 - (B) an Equity,is treated as an exposure to the underlying issuer for the face value of the Future or forward contract;
 - (iii) a Future on a index, an equity Swap based on an index or any other index-linked Derivative where that Future, equity Swap or index-linked derivative is broken down into its constituent positions by a Participant for the purposes of calculating a position risk amount, is treated as an exposure to each underlying constituent position;
 - (iv) an Option or right over a Financial Instrument (other than a Financial Instrument referred to in clause 2.3(a) above) is treated as an exposure at:
 - A. the full value of the underlying position;
 - B. the delta weighted value of the underlying instrument generated by a model approved by ASX Clear under the contingent loss matrix method; or
 - C. the delta weighted value of the underlying instrument where a delta is published by a relevant exchange, clearing house or an independent market information source.
- (c) A delta weighted value under clause 2.3(b)(iv) may be offset against the corresponding underlying instrument in calculating an Equity Net Position or Debt Net Position under clauses 3, 4 and 5.

Introduced 11/03/04

3. EQUITY METHOD

- (a) A Participant's issuer large exposure risk requirement in relation to an issuer is the greater of the following amounts:
 - (i) the risk amount calculated by comparing the Equity Net Position to Liquid Capital under clause 3(b); and
 - (ii) the risk amount/s calculated by comparing the Equity Net Position to the issue/s under clause 3(c).
- (b) If the absolute value of an Equity Net Position to an issuer is greater than 25% of the Participant's Liquid Capital the risk amount is:

- (i) 12% for each single Equity in a Recognised Market Index; and
 - (ii) 16 % for any other single Equity,
- of the amount in excess of 25% of Liquid Capital.
- (c) If the absolute value of an Equity Net Position to an individual issue/s is greater than 5% of that issue, the risk amount/s is:
- (i) 12% for each single Equity in a Recognised Market Index; and
 - (ii) 16% for any other single Equity,
- of the amount in excess of 5% of the issue/s.

Introduced 11/03/04

4. DEBT METHOD

- (a) A Participant's issuer large exposure risk amount in relation to an issuer is the greater of the following amounts:
- (i) the risk amount calculated by comparing the Debt Net Position to Liquid Capital under clause 4(c); and
 - (ii) the risk amount/s calculated by comparing the Debt Net Position to the issue/s under clause 4(d).
- (b) In calculating the issuer large exposure risk amount under this method:
- (i) an individual issue refers to an individual series or tranche of an individual series issued by an individual issuer;
 - (ii) long and short positions may be offset across series for the purposes of determining large exposure to an issuer; and
 - (iii) a large exposure to an individual issuer is the sum of all series issued by that issuer.
- (c) If the absolute value of a Debt Net Position to an issuer is greater than 25% of the Participant's Liquid Capital, the risk amount is:
- (i) the relevant standard method Position Risk Factor specified in Table 1.2, Annexure 5 multiplied by the amount in excess of 25%; and
 - (ii) if more than one series is held, the Position Risk Factor for the longest dated instrument should be applied to the excess over 25%.
- (d) If the absolute value of a Debt Net Position to an individual issue/s is greater than 10% of that issue, the risk amount/s is:
- (i) the relevant standard method Position Risk Factor specified in Table 1.2, Annexure 5 multiplied by the excess over 10%; and

- (ii) if more than one series is held, the risk amount is the aggregate of the risk amounts calculated under clause 4(d)(i) for each individual series.

Introduced 11/03/04

5. EQUITY AND DEBT METHOD

- (a) A Participant's issuer large exposure risk amount in relation to an issuer is based on the absolute sum of the Equity Net Positions and Debt Net Positions.
- (b) If the absolute sum of the Equity Net Positions and Debt Net Positions is greater than 25% of a Participant's Liquid Capital, then the risk amount is the relevant standard method Position Risk Factor specified in Table 1.1 or Table 1.2, Annexure 5 multiplied by the excess over 25% according to the following:
 - (i) if the Equity Net Positions represent the greatest proportion of the aggregate Net Position, the standard method Position Risk Factor specified in Table 1.1, Annexure 5;
 - (ii) if the Debt Net Positions represent the greatest proportion of the aggregate Net Position,
 - A. the relevant standard method Position Risk Factor specified in Table 1.2, Annexure 5; and
 - B. if more than one series is held, the Position Risk Factor for the longest dated instrument; or
 - (iii) if the Equity Net Position and Debt Net Positions are held in equal proportions, the greatest of the standard method Position Risk Factors specified in Tables 1.1 or 1.2, Annexure 5.

Introduced 11/03/04

ANNEXURE 3 POSITION RISK REQUIREMENT

PART 1: EQUITY POSITION RISK

Note: Part 1 only deals with the calculation of equity position risk amounts under the methods set out within this Part 1 (i.e. all available methods for equity positions other than the internal models approach set out in Part 4). Participants using a combination of Parts 1 and 4 for equity positions, as per part (c) of the definition of Position Risk Requirement, should note that the contents of Part 1 do not reflect the availability of the internal models approach of Part 4.

1. EQUITY POSITION RISK AMOUNT

1.1 Nature of equity position risk amount

The equity position risk amount in relation to a Participant's equity positions is the absolute sum of the individual position risk amounts for equity positions calculated for each country using the methods of calculation set out in this Annexure 3.

Introduced 11/03/04

1.2 Overview of methods

- (a) The standard method and building block method are the two main methods for measuring the equity position risk amount. They are supplemented by other methods, the use of which largely depends on the Financial Instruments in which principal positions are taken.
- (b) In calculating the equity position risk amount, the following methods must be used:

Nature of Positions	Standard Method	Building Block Method	Contingent Loss Matrix Method	Margin Method	Basic Method	Arbitrage Method
Physical (not equity derivatives)	Yes.	Yes.	Yes, in conjunction with positions in options.	No.	No.	Yes, subject to certain conditions.
Non-option equity derivatives	Yes, if converted to equity equivalent positions.	Yes, if converted to equity equivalent positions.	Yes, in conjunction with positions in options.	Yes, if exchange traded and margined and not calculated under any other method.	No.	Yes, if arising as a result of futures arbitrage strategy.
Equity Options	Yes, if satisfy relevant criteria and not permitted to use contingent loss matrix method.	Yes, if satisfy relevant criteria and not permitted to use contingent loss matrix method.	Yes. Pricing model must be approved by ASX Clear.	Yes, if exchange traded and margined, and not calculated under any other method.	Yes, if not permitted to use contingent loss matrix method.	No.

- (c) For the purposes of Part 1 of this Annexure 3, a right over an equity must be treated as an Option position.

Introduced 11/03/04

2. STANDARD METHOD

2.1 Application

- (a) Physical Equity positions may be included in the standard method.
- (b) Equity Derivative positions other than Options may be included in the standard method if the positions are converted to Equity Equivalents according to clause 8.
- (c) Equity Derivative positions which are Options may be included in the standard method only if they are purchased positions or if they are written positions which are exchange traded and subject to daily margin requirements and the purchased or written positions are:
 - (i) In the Money by at least the relevant standard method Position Risk Factor for the underlying position specified in Table 1.1, Annexure 5; and
 - (ii) converted to Equity Equivalents according to clause 8.

If the above criteria are not met, the Options must be treated under one of the option methods set out in clauses 4, 5 and 6.

Introduced 11/03/04

2.2 Method

The position risk amount for equity positions to which the standard method is applied is the absolute sum of the product of individual Equity Net Positions at the mark to market value and the applicable Position Risk Factor specified in Table 1.1, Annexure 5.

Introduced 11/03/04

3. BUILDING BLOCK METHOD

3.1 Application

- (a) Physical Equity and Equity Derivative positions may be included in the building block method if there are at least 5 long or 5 short Equity Net Positions in the one country and which are included in Recognised Market Indexes.
- (b) Equity Derivative positions other than Options may be included in the building block method if the positions are converted to Equity Equivalents according to clause 8.

- (c) Equity Derivative positions which are Options may be included in the building block method only if they are purchased positions or if they are written positions which are exchange traded and subject to daily margin requirements and the purchased or written positions are:
 - (i) In the Money by at least the relevant standard method Position Risk Factor for the underlying position specified in Table 1.1, Annexure 5; and
 - (ii) converted to Equity Equivalentents according to clause 8.

If the above criteria are not met, the Options must be treated under one of the option methods set out in clauses 4, 5 and 6.

Introduced 11/03/04

3.2 Method

- (a) The position risk amount for equity positions to which the building block method is applied is the aggregate of a specific risk and a general risk amount for each Equity Net Position at the mark to market value.
- (b) The specific risk amount is calculated as the aggregate of each Equity Net Position, multiplied by the relevant specific risk Position Risk Factor specified in Table 1.1 of Annexure 5. The aggregate is calculated by reference to the absolute value of each Equity Net Position.
- (c) The general risk amount is calculated by:
 - (i) multiplying each Equity Net Position by the relevant general risk Position Risk Factor specified in Table 1.1 of Annexure 5; and
 - (ii) aggregating the results of these calculations. In aggregating these calculations, positive and negative signs (that is, long and short positions respectively) may be offset in determining the aggregate number.

The absolute value of this aggregate number is the general risk amount.

Introduced 11/03/04

4. CONTINGENT LOSS MATRIX METHOD

4.1 Application

- (a) Equity Derivative positions which are Options together with physical Equity and other Equity Derivative positions may be included in the contingent loss matrix method but only if used in conjunction with an option pricing model approved by ASX Clear.
- (b) [Deleted]

- (c) A Participant applying the contingent loss matrix method may use method 2 as set out in clause 4.3 if there are 5 long or 5 short Equity Net Positions which are included in Recognised Market Indexes, otherwise it must use method 1 as set out in clause 4.2.

Introduced 11/03/04

4.2 Method 1

- (a) This method calculates the risk amount in one step for each underlying in a manner similar to the standard method.
- (b) The position risk amount for equity positions to which this method is applied is the greatest loss arising from simultaneous prescribed movements in the closing market price of the underlying position and the option implied volatility.
- (c) The prescribed movements are the Position Risk Factors for the standard method specified in Table 1.1, Annexure 5.
- (d) A separate matrix must be constructed for each option portfolio and associated hedges in each country.
- (e) Changes in the value of the option portfolio must be analysed over a fixed range of changes above and below the current market price of the underlying position and implied option volatility as follows:
 - (i) the relevant Position Risk Factor is to be divided into seven equally spaced price shift intervals (including the current market price); and
 - (ii) the relevant implied volatility Position Risk Factor is to be divided into three equally spaced volatility shift intervals (including the current market implied volatility).
- (f) Each option portfolio is to be re-priced using the adjusted underlying position and volatility price as described in clause 4.2(e). The value in each element of the contingent loss matrix will be the difference between the revalued option portfolio and the option portfolio calculated using the closing market price.
- (g) The absolute value of the aggregate of the greatest loss for each matrix is the position risk amount.

Introduced 11/03/04

4.3 Method 2

- (a) This method calculates the risk amount as the aggregate of a specific risk and a general risk amount for each underlying in a manner similar to the building block method.
- (b) The specific risk amount is calculated as the aggregate of the delta weighted value of the underlying instrument calculated by the option pricing model approved by ASX Clear, multiplied by the relevant specific risk Position Risk Factor specified in Table 1.1 of Annexure 5.

- (c) The general risk amount is calculated in the manner described in clause 4.2 replacing clauses 4.2(c) and 4.2(g) as described below.
- (d) The prescribed movements referred to in clause 4.2(c) are replaced with the Position Risk Factors for the building block method specified in Table 1.1, Annexure 5.
- (e) The position risk amount calculated in clause 4.2(g) is replaced with the general risk amount which is the absolute value of the greatest loss in a single country matrix.
- (f) A single country matrix is constructed by superimposing each separate matrix under clause 4.2(d) so that the values in the corresponding matrix elements are netted to form a single value for each element.

Introduced 11/03/04

5. MARGIN METHOD

5.1 Application

Equity Derivative positions which are exchange traded and have a positive Primary Margin Requirement must be included in the margin method if the Participant:

- (a) has not been approved by ASX Clear to use the contingent loss matrix method; and
- (b) is not permitted to use any of the other Methods set out in clause 1.2 of this Annexure 3.

Introduced 11/03/04

5.2 Method

- (a) The position risk amount for Equity Derivative positions under the margin method is 100% of the Primary Margin Requirement for those Equity Derivative positions as determined by the relevant exchange or clearing house multiplied by 4.

Introduced 11/03/04 Amended 19/02/24

6. BASIC METHOD

6.1 Application

Equity Derivative positions which are purchased (long) or written (short) Options may be included in the basic method.

Introduced 11/03/04

6.2 Method

- (a) The position risk amount for a purchased Option is the lesser of:
 - (i) the mark to market value of the underlying equity position multiplied by the standard method Position Risk Factor for the underlying position specified in Table 1.1, Annexure 5; and
 - (ii) the mark to market value of the Option.
- (b) The position risk amount for a written Option is:
 - (i) the mark to market value of the underlying equity position multiplied by the standard method Position Risk Factor for the underlying position specified in Table 1.1, Annexure 5 reduced by:
 - A. any excess of the exercise value over the current market value of the underlying position in the case of a call Option, but limited to nil if it would otherwise be negative; or
 - B. any excess of the current market value of the underlying position over the exercise value in the case of a put Option, but limited to nil if it would otherwise be negative.

Introduced 11/03/04

7. ARBITRAGE METHOD

7.1 Application

Equity Derivative positions arising as a result of Futures arbitrage strategies may be included in the arbitrage method if the Participant has a position in:

- (a) two Futures over similar indexes; or
- (b) a Future over a broadly based index and a position in a matching physical basket,

and if the requirements set out below are satisfied.

Introduced 11/03/04

7.2 Method – similar indexes

A Participant's position risk amount for a position in two Futures over similar indexes is 2% of the Equity Equivalent of one of the Futures over an index position at the mark to market value but only if the Participant:

- (a) has an opposite position in a Future over the same index at a different date or in a different market; or

- (b) has an opposite position in a Future at the same date in a different but similar index (where two indexes are similar if they contain sufficient common components that account for at least 70% of each index.

The position risk amount for the opposite Future position is nil.

Introduced 11/03/04

7.3 Method – a broadly based index and a matching basket of the stocks from that index

A Participant may calculate the position risk amount for a Future over an index and a position in a matching physical basket under one of two possible methodologies:

- (a) the position in the Future over an index may be disaggregated into the notional physical positions and the position risk amount for these notional positions and the physical basket may then be calculated in accordance with the standard method or building block method for equity positions; or
- (b) 2% of the mark to market value of the Future over the index if:
 - (i) the arbitrage trades have been specifically entered into and are separately monitored over the life of the arbitrage;
 - (ii) the mark to market value of the physical basket is greater than 80% and less than 120% of the mark to market value of the notional position in the Future over the index; and
 - (iii) the sum of the index weights of the individual positions in the required physical basket is greater than 70% of the Future over the index, where the required physical basket is calculated by:
 - A. ranking all mark to market positions in the physical basket in ascending dollar value;
 - B. converting each dollar value position to a percentage of the total dollar value of the physical basket; and
 - C. adding the percentages in ascending order until the total of these percentages exceeds 70%.

Introduced 11/03/04

8. CALCULATION OF EQUITY EQUIVALENT POSITIONS

8.1 Swaps

The Equity Equivalent for a Swap is two notional positions, one for each leg of the Swap under which:

- (a) there is a notional long position in an Equity or Equity Derivative on the leg of the Swap on which an amount is received; and

- (b) there is a notional short position in an Equity or Equity Derivative on the leg of the Swap on which an amount is paid.

If one of the legs of the Swap provides for payment or receipt based on some reference to a Debt Instrument or Debt Derivative, the position risk amount for that leg of the Swap should be assessed in accordance with Part 2 of this Annexure.

Introduced 11/03/04

8.2 Options

The Equity Equivalent for an Option is:

- (a) for purchased call Options and written put Options, a long position at the mark to market value of the underlying equity position, or in the case of an Option on an index or physical basket the mark to market value of either the index, basket, or the notional position in the underlying; or
- (b) for purchased put Options and written call Options, a short position at the mark to market value of the underlying equity position, or in the case of an Option on an index or physical basket, the mark to market value of either the index, basket, or the notional position in the underlying.

Introduced 11/03/04

8.3 Futures and forward contracts

The Equity Equivalent:

- (a) for a Future and forward contract over a single Equity, is the mark to market value of the underlying;
- (b) for a Future and a forward contract over an index or a physical basket, is the mark to market value of either the index, basket, or the notional position in the underlying.

Introduced 11/03/04

8.4 Convertible notes

The Equity Equivalent of a convertible note, is either:

- (a) if the Participant:
 - (i) does not use the contingent loss matrix method;
 - (ii) the premium is in the money by less than 10%, where premium in this context means the mark to market value of the convertible note less the mark to market value of the underlying Equity, expressed as a percentage of the mark to market value of the underlying Equity; and
 - (iii) there are less than 30 days to the conversion date;

the mark to market value of the underlying Equity; or

- (b) if the Participant uses the contingent loss matrix method, as calculated according to that method,

but otherwise the convertible note (or, in the case of a convertible note which is evaluated in accordance with the procedure stated in clause 8.4(b) the debt component of the convertible note) must be treated as a debt position in accordance with Debt Equivalent requirements.

Introduced 11/03/04

8.5 Other positions

The Equity Equivalent of an equity position arising under any other Financial Instrument is as prescribed by ASX Clear.

Introduced 11/03/04

9. CALCULATION OF EQUITY NET POSITIONS

The equity net positions are either the long or short positions resulting from offsetting equity positions and Equity Equivalents calculated in the following way:

- (a) a Participant may net a long position against a short position only where the positions are in the same actual instrument. This includes Equity Equivalent positions calculated in accordance with clause 8. For the purposes of this clause 9(a):
 - (i) depository receipts may be treated as if they are the same positions in the corresponding instrument and at the same value if:
 - A. the positions in the depository receipt and underlying have been entered into as a specific arbitrage and have the certainty of a locked-in profit (or loss);
 - B. the profit (or loss) in sub-paragraph (A) is Liquid; and
 - C. all conversion costs and foreign exchange costs are immediately provided and are separately monitored over the life of the arbitrage,but otherwise must be valued at the current exchange rate; and
 - (ii) instalment receipts may be treated as if they are positions in the corresponding instrument.
- (b) if the contingent loss matrix method is not used for Options, then an Option position can only be offset if it is In the Money by at least the standard method Position Risk Factor specified in Table 1.1 of Annexure 5 applicable to the underlying position.

Introduced 11/03/04

PART 2 – DEBT POSITION RISK

Note: Part 2 only deals with the calculation of debt position risk amounts under the methods set out within this Part 2 (i.e. all available methods for debt positions other than the internal models approach set out in Part 4). Participants using a combination of Parts 2 and 4 for debt positions, as per part (c) of the definition of Position Risk Requirement, should note that the contents of Part 2 do not reflect the availability of the internal models approach of Part 4.

10. DEBT POSITION RISK AMOUNT

10.1 Nature of debt position risk amount

The debt position risk amount in relation to a Participant's debt positions is the absolute sum of the individual position risk amounts calculated for debt positions for each currency using the methods of calculation set out in this Annexure 3.

Introduced 11/03/04

10.2 Overview of methods

- (a) The standard method and building block method are the two main methods for measuring the debt position risk amount. They are supplemented by other methods, the use of which largely depends on the Financial Instruments in which principal positions are taken.
- (b) In calculating the debt position risk amount, the following methods must be used:

Nature of Positions	Standard Method	Building Block Method	Contingent Loss Matrix Method	Margin Method	Basic Method
Physical (not debt derivatives)	Yes.	Yes.	Yes, in conjunction with positions in options.	No.	No.
Non-option debt derivative	No.	Yes, if converted to debt equivalent positions.	Yes, in conjunction with positions in options.	Yes, if exchange traded and margined and not calculated under any other method.	No.
Debt Options	No.	Yes, if satisfy relevant criteria and not permitted to use contingent loss matrix method.	Yes. Pricing model must be approved by ASX Clear.	Yes, if exchange traded and margined and not calculated under any other method.	Yes, if not permitted to use contingent loss matrix method.

Introduced 11/03/04

11. STANDARD METHOD

11.1 Application

Only physical Debt Instrument positions may be included in the standard method.

Introduced 11/03/04

11.2 Method

The position risk amount for debt positions to which the standard method is applied is the absolute sum of the product of individual Debt Net Positions at the mark to market value and the applicable Position Risk Factor specified in Table 1.2, Annexure 5.

Introduced 11/03/04

12. BUILDING BLOCK METHOD

12.1 Application

- (a) Physical Debt Instrument positions may be included in the building block method.
- (b) Debt Derivative positions other than Options may be included in the building block method if the positions are converted to Debt Equivalents according to clause 16.
- (c) Debt Derivative positions which are Options may be included in the building block method only if they are purchased positions or if they are written positions which are exchange traded and subject to daily margin requirements and the purchased or written positions are:
 - (i) In the Money by at least the relevant standard method Position Risk Factor for the underlying position specified in Table 1.2, Annexure 5; and
 - (ii) converted to Debt Equivalents according to clause 16.

If the above criteria are not met, the Options must be treated under one of the option methods referred to in clauses 13, 14 and 15.

Introduced 11/03/04

12.2 Method

- (a) The position risk amount for debt positions to which the building block method is applied is the aggregate of a specific risk and a general risk amount for the Debt Net Position at the mark to market value.
- (b) The specific risk amount is calculated as the aggregate of each Debt Net Position, multiplied by the relevant specific risk Position Risk Factor specified in

Table 1.3, Annexure 5. The aggregate is calculated by reference to the absolute value of each Debt Net Position.

- (c) The general risk amount is calculated in accordance with:
 - (i) the maturity method under clause 12.3; or
 - (ii) the duration method under clause 12.4.

The absolute value of this aggregate number is the general risk amount.

Introduced 11/03/04

12.3 General risk amount – maturity method

- (a) To calculate the general risk amount based on the maturity method:
 - (i) allocate each Debt Net Position to the appropriate time band specified in Table 1.2, Annexure 5. Fixed rate instruments should be allocated according to the residual term to maturity and floating rate instruments according to the residual term to the next repricing date;
 - (ii) aggregate the total long and total short Debt Net Positions in each time band;
 - (iii) calculate a risk weighted long and short position by multiplying the gross long and gross short position in each time band by the relevant general risk Position Risk Factor for that band as specified in Table 1.2, Annexure 5. The sum of these, taking into account the sign, is the net position amount (NPA);
 - (iv) in each time band, multiply the lesser of the risk weighted long and short positions as calculated in clause 12.3(a)(iii) by the relevant time band matching factor (TBMF) as specified in Table 1.4, Annexure 5. The absolute sum of these is the time band amount (TBA);
 - (v) net the risk weighted long and short positions within each time band so that each time band has either a net long position or a net short position. Within each zone, as defined in Table 1.2, Annexure 5, aggregate the net long time band positions and the net short time band positions. Multiply the lesser of the resulting two totals in each of the zones by the relevant zone matching factor (ZMF) as specified in Table 1.4, Annexure 5. The absolute sum of these is the zone amount (ZA);
 - (vi) net the aggregate risk weighted long and short positions in each time zone as calculated in clause 12.3(a)(v). To the extent that an offset can be made between adjacent zones, multiply the lesser of the values by the adjacent zone matching factor (AZMF) as specified in Table 1.4, Annexure 5. The absolute sum of these is the adjacent zone amount (AZA);
 - (vii) to the extent that an offset can be made between non-adjacent zones, multiply the lesser of the non-adjacent zone risk weighted Debt Net

Positions by the non-adjacent zone matching factor (NAZMF) as specified in Table 1.4, Annexure 5. This is the non-adjacent zone amount (NAZA);

- (viii) any residual position remaining following the calculation in clause 12.3(a)(vi) can be used to reduce the non-adjacent zone Debt Net Positions in clause 12.3(a)(vii).
- (b) The overall general risk amount under the maturity method is then the absolute sum of the individual steps as follows:
 - (i) the net position amount (NPA);
 - (ii) the time band amount (TBA);
 - (iii) the zone amount (ZA);
 - (iv) the adjacent zone amount (AZA); and
 - (v) the non-adjacent zone amount (NAZA).

Introduced 11/03/04

12.4 General risk amount – duration method

- (a) The calculation of the general risk amount under the duration method is identical to that for the maturity method except that:
 - (i) instead of calculating positions under clause 12.3(a)(iii), calculate the duration weight of each position by multiplying the market value of each position by the modified duration of the position and by the assumed yield change for the appropriate time band specified in Table 1.2, Annexure 5 (the duration method building block method general risk Position Risk Factor);
 - (ii) any reference in clause 12.3(a) to Table 1.4, Annexure 5 is to the relevant timeband matching factor (TBMF) for the duration method; and
 - (iii) ASX Clear must first approve a Participant's use of this method.

Introduced 11/03/04

13. CONTINGENT LOSS MATRIX METHOD

13.1 Application

- (a) Debt Derivative positions which are Options together with physical Debt Instruments and other Debt Derivatives may be included in the contingent loss matrix method but only if used in conjunction with an option pricing model approved by ASX Clear.

(b) [Deleted]

(c) A Participant applying the contingent loss matrix method may use method 1 or method 2 as set out in clauses 13.2 and 13.3.

Introduced 11/03/04

13.2 Method 1 – [DELETED]

13.3 Method 2 – maturity method

- (a) This method calculates the risk amount as the aggregate of a specific risk, a general risk and a volatility risk amount for each underlying in a manner similar to the building block method – maturity method.
- (b) The specific risk amount is calculated as the aggregate of each Debt Net Position or the delta weighted value of the underlying instrument calculated by the option pricing model approved by ASX Clear, multiplied by the relevant specific risk Position Risk Factor specified in Table 1.3 of Annexure 5.
- (c) The general risk and volatility risk amounts are calculated as described below.
- (d) The prescribed movements are the Position Risk Factors for the maturity building block method specified in Table 1.2, Annexure 5.
- (e) A separate matrix must be constructed for each individual time band as specified in Table 1.2, Annexure 5.
- (f) Changes in the value of the option portfolio must be analysed over a fixed range of changes above and below the current market rate or price of the underlying position and option implied volatility as follows:
- (i) The relevant Position Risk Factor is to be divided into seven equally spaced rate or price shift intervals (including the current market rate or price); and
 - (ii) The relevant implied volatility Position Risk Factor is to be divided into three equally spaced volatility shift intervals (including the current market implied volatility).
- (g) Each option portfolio is to be re-priced using the adjusted underlying price and volatility as described in clause 13.3(f). The value in each element of the contingent loss matrix will be the difference between the revalued option portfolio and the option portfolio calculated using the closing market prices.
- (h) The general risk amount is calculated by:
- (i) identifying from each matrix the greatest loss along the directional axis;
 - (ii) creating an equivalent notional position for each greatest loss which is:

- A. a long position, if the greatest loss occurs for a decrease in the value of the underlying; and
- B. a short position otherwise;
- (iii) allocating each long and short position into the appropriate time band specified in Table 1.2, Annexure 5 to form the risk weighted values;
- (iv) aggregating these long and short positions in each time band, taking into account the sign, to form the net position amount (NPA) referred to in clause 12.3(a)(iii); and
- (v) applying the principles referred to in clauses 12.3(a)(iv) to (viii) and clause 12.3(b).
- (i) The volatility risk amount is calculated by:
 - (i) identifying from each matrix the greatest loss along the volatility axis; and
 - (ii) taking the absolute value of the aggregate of the greatest loss for each matrix.

Introduced 11/03/04

14. MARGIN METHOD

14.1 Application

Debt Derivative positions which are exchange traded and have a positive Primary Margin Requirement must be included in the margin method if the Participant:

- (a) has not been approved by ASX Clear to use the contingent loss matrix method; and
- (b) is not permitted to use any of the other methods referred to in clause 10.2 of this Annexure 3.

Introduced 11/03/04

14.2 Method

- (a) The position risk amount for Debt Derivative positions under the margin method is 100% of the Primary Margin Requirement for those Debt Derivative positions as determined by the relevant exchange or clearing house in respect of each position multiplied by 4.

Introduced 11/03/04 Amended 19/02/24

15. BASIC METHOD

15.1 Application

Debt Derivative positions which are purchased (long) or written (short) Options may be included in the basic method.

Introduced 11/03/04

15.2 Method

- (a) The position risk amount for a purchased Option is the lesser of:
 - (i) the mark to market value of the underlying debt position multiplied by the standard method Position Risk Factor for the underlying position specified in Table 1.2, Annexure 5; and
 - (ii) the mark to market value of the Option.
- (b) The position risk amount for a written Option is:
 - (i) the mark to market value of the underlying debt position multiplied by the standard method Position Risk Factor for the underlying position specified in Table 1.2, Annexure 5 reduced by:
 - A. any excess of the exercise value over the current market value of the underlying position in the case of a call Option, but limited to nil if it would otherwise be negative; or
 - B. any excess of the current market value of the underlying position over the exercise value in the case of a put Option, but limited to nil if it would otherwise be negative.

Introduced 11/03/04

16. CALCULATION OF DEBT EQUIVALENT POSITIONS

16.1 Swaps

The Debt Equivalent for a Swap is two notional positions, one for each leg of the Swap under which:

- (a) there is a notional long position in a Debt Instrument or Debt Derivative on the leg of the Swap on which interest is received with a maturity equal to either the next interest reset date for a floating rate payment or the maturity of the Swap for a fixed rate payment; and
- (b) there is a notional short position in a Debt Instrument or Debt Derivative on the leg of the Swap on which interest is paid with a maturity equal to either the next interest reset date for a floating rate payment or the maturity of the Swap for a fixed rate payment.

If one of the legs of the Swap provides for payment or receipt based on some reference to an Equity or Equity Derivative, the position risk amount for that leg of the Swap should be assessed in accordance with Part 1 of this Annexure.

Introduced 11/03/04

16.2 Options

The Debt Equivalent for an Option is:

- (a) for purchased call Options or written put Options, a long notional position:
 - (i) in the underlying Debt Instrument, in the case of an Option over a single Debt Instrument, and at the mark to market value of the Debt Instrument and its residual maturity; or
 - (ii) in the Debt Instrument with the longest residual maturity, in the case of an Option over Debt Instruments or interest rate index, and at the mark to market value;
- (b) for purchased put Options or written call Options, a short notional position:
 - (i) in the underlying Debt Instrument, in the case of an Option over a single Debt Instrument, and at the mark to market value of the Debt Instrument and its residual maturity; or
 - (ii) in the case of an Option over a debt or interest rate index, in the Debt Instrument with the longest residual maturity in the index, at the mark to market value of the index; and
- (c) for purchased call Options or written put Options on a Future, a long notional position calculated under clause 16.3(a) and for purchased put Options or written call Options on a Future, a short notional position calculated under clause 16.3(b).

Introduced 11/03/04

16.3 Futures, forwards and forward rate agreements and options on futures

The Debt Equivalent for a Future, forward contract or Forward Rate Agreement is:

- (a) if purchased, a combination of a long position in a notional Debt Instrument with a maturity equal to the combined term of the contract plus the term of the underlying Debt Instrument, and a short position in the notional Debt Instrument with a maturity equal to the term of the contract;
- (b) if sold, a combination of a short position in a notional Debt Instrument with a maturity equal to the combined term of the contract plus the term of the underlying Debt Instrument, and a long position in the notional Debt Instrument with a maturity equal to the term of the contract;
- (c) if over an index, a combination of a notional position in the instrument with the longest term, with a maturity equal to the combined term of the contract plus

the term of that Debt Instrument, and an opposite position in that Debt Instrument with a maturity equal to the term of the contract; and

- (d) if a range of deliverable instruments can be delivered to fulfil the contract the Participant may elect which Debt Instrument goes into the time band, Table 1.2, Annexure 5 but should take account of any conversion factor for the purposes of calculating the position risk.

Introduced 11/03/04

16.4 Convertible Notes

The Debt Equivalent for a convertible note which is not within clause 8.4(a) or (b), is a position in a Debt Instrument.

Introduced 11/03/04

16.5 Basket or index products

The Debt Equivalent for a basket or index product, where there is a known weight for each component Debt Instrument, is a position in a portfolio of Debt Instruments with corresponding weights and if the basket or index is based on:

- (a) Government Debt Instruments, then a zero specific risk Position Risk Factor should be used; and
- (b) Qualifying Debt Instruments or other Debt Instruments, then the appropriate specific risk Position Risk Factor should be used.

Introduced 11/03/04

16.6 Other positions

The Debt Equivalent of a debt position arising under any other Financial Instrument is as prescribed by ASX Clear.

Introduced 11/03/04

17. CALCULATION OF DEBT NET POSITIONS

The debt net position is either the long or short position resulting from offsetting positions in Debt Instruments and Debt Derivatives in the following way:

- (a) subject to clause 17(c) and (d), short Debt Instrument and Debt Equivalent positions may be directly offset against long Debt Instrument and Debt Equivalent positions provided that the issuer, coupon, maturity are identical;
- (b) if the contingent loss matrix method is not used for Options, then an Option position can only be offset if it is In the Money by at least the standard method Position Risk Factor specified in Table 1.2 of Annexure 5 applicable to the underlying position;

- (c) a matched position in a Future or forward contract and its underlying may be offset provided that:
 - (i) the term to maturity of the Future or forward contract is included in the relevant time band specified in Table 1.2 of Annexure 5;
 - (ii) where the Future or the forward contract comprises a range of deliverable instruments, offsetting of positions in the Future or forward contract and the underlying is only permissible when there is a readily identifiable underlying which is profitable for the short position holder to deliver; and
 - (iii) for a Future or forward contract where a Participant has a right to substitute cash settlement for physical delivery and the price at settlement is calculated with reference to a general market price indicator then no offset is allowed against the underlying; and
- (d) to qualify for offsets across product groups, the positions must relate to the same underlying instrument type, be of the same nominal value, and:
 - (i) in relation to Futures, the offsetting positions and the notional or underlying instruments to which the Futures relate must be identical products and mature within 7 days of each other;
 - (ii) in relation to Swaps and Forward Rate Agreements the reference rate (for floating rate positions) must be identical and the coupon closely matched (within 15 basis points); and
 - (iii) in relation to Swaps, Forward Rate Agreements and forward contracts, the next interest fixing date, or, for fixed coupon positions or forward contracts, the residual maturity (or, where there is a call or put option in the relevant instrument, the effective maturity of the instrument) must correspond within the following limits:
 - A. less than 1 month hence, same day;
 - B. between one month and one year hence, within 7 days; and
 - C. over one year hence, within 30 days.

Introduced 11/03/04

PART 3 – FOREIGN EXCHANGE POSITION RISK

Note: Part 3 only deals with the calculation of foreign exchange position risk amounts under the methods set out within this Part 3 (i.e. all available methods for foreign exchange positions other than the internal models approach set out in Part 4). Participants using a combination of Parts 3 and 4 for foreign exchange positions, as per part (c) of the definition of Position Risk Requirement, should note that the contents of Part 3 do not reflect the availability of the internal models approach of Part 4.

18. FOREIGN EXCHANGE POSITION RISK AMOUNT

18.1 Nature of foreign exchange position risk amount

The foreign exchange position risk amount in relation to a Participant's foreign exchange positions is the absolute sum of the individual position risk amounts for foreign exchange positions calculated using the methods of calculation set out in this Annexure 3.

Introduced 11/03/04

18.2 Overview Of Methods

- (a) The standard method is the main method for measuring the foreign exchange position risk amount. The method is supplemented by other methods, the use of which largely depends on the Financial Instruments in which principal positions are taken.
- (b) In calculating foreign exchange position risk amounts, the following methods must be used:

Nature of Positions	Standard Method	Contingent Loss Matrix Method
Physical* (not foreign exchange derivatives)	Yes	Yes In conjunction with positions in options
Non-option foreign exchange derivatives	Yes, if converted to foreign exchange equivalent positions	Yes In conjunction with positions in options
Foreign Exchange Options	Yes, if satisfy relevant criteria and not permitted to use contingent loss matrix method	Yes, must be used for all written options. Pricing model must be approved by ASX Clear

* A physical position in Part 3 of this Annexure 3 includes foreign currency assets and liabilities and Equity and Debt Instruments denominated in a foreign currency.

Introduced 11/03/04

19. STANDARD METHOD

19.1 Application

- (a) Foreign currency physical positions may be included in standard method.
- (b) Foreign Exchange Derivative positions other than Options may be included in the standard method if the positions are converted to Foreign Exchange Equivalents according to clause 21.

- (c) Foreign Exchange Derivative positions which are Options may be included in the standard method only if they are purchased positions and the purchased positions are converted to a Foreign Exchange Equivalent according to clause 21.

If the above criteria are not met, the Options must be treated under the contingent loss matrix method set out in clause 20.

Introduced 11/03/04

19.2 Method

- (a) The position risk amount for foreign exchange positions to which the standard method is applied is the greater of the absolute value of the aggregate of the converted:
 - (i) net open long position in foreign currencies; and
 - (ii) net open short position in foreign currencies,multiplied by the Position Risk Factor specified in Table 1.7, Annexure 5.
- (b) Foreign Exchange Derivative positions which are purchased Options and are In the Money by at least the standard method Position Risk Factor specified in Table 1.7, Annexure 5, are to be converted to a Foreign Exchange Equivalent in accordance with clause 21 and included in the net open position in accordance with clause 22.
- (c) Foreign Exchange Derivative positions which are purchased Options and are not In the Money by at least the standard method Position Risk Factor specified in Table 1.7, Annexure 5, are to be converted to a Foreign Exchange Equivalent in accordance with clause 21 and:
 - (i) where the resulting currency positions from the option increases the net open position in the currency if included, the position must be included in the net open position; and
 - (ii) where the resulting currency positions from the option decreases the net open position in the currency if included, the position must be excluded in the net open position.

Introduced 11/03/04

20. CONTINGENT LOSS MATRIX METHOD

20.1 Application

- (a) Foreign Exchange Derivative positions which are Options together with physical foreign exchange and other Foreign Exchange Derivative positions may be included in the contingent loss matrix method but only if used in conjunction with an option pricing model approved by ASX Clear.

- (b) Foreign Exchange Derivative positions which are written Options must be included in the contingent loss matrix method.

Introduced 11/03/04

20.2 Method

- (a) The position risk amount for foreign exchange positions to which the contingent loss matrix method is applied is the greatest loss arising from simultaneous prescribed movements in the closing market rate of the underlying currency pairing and the option implied volatility.
- (b) The prescribed movements are the Position Risk Factors for the standard method that are specified in Table 1.7, Annexure 5.
- (c) A separate matrix must be constructed for each option portfolio and associated hedges in an individual currency pairing.
- (d) Changes in the value of the option portfolio must be analysed over a fixed range of changes above and below the current market exchange rate and option implied volatility as follows:
 - (i) the relevant Position Risk Factor is to be divided into seven equally spaced rate shift intervals (including the current market rate); and
 - (ii) the implied volatility Position Risk Factor is to be divided into three equally spaced volatility shift intervals (including the current market implied volatility).
- (e) Each option portfolio is to be re-priced using the adjusted underlying and volatility price as described in clause 20.2(d). The value in each element of the contingent loss matrix will be the difference between the revalued option portfolio and the option portfolio measured using the closing market rates.

Introduced 11/03/04

21. CALCULATION OF FOREIGN EXCHANGE EQUIVALENT POSITIONS

21.1 Options

The Foreign Exchange Equivalent for an Option is:

- (a) for purchased call Options and written put Options, a long position at the notional face value of the underlying contract; and
- (b) for purchased put Options and written call Options, a short position at the notional face value of the underlying contract.

Introduced 11/03/04

21.2 Futures

The Foreign Exchange Equivalent for a currency Future is the notional face value of the underlying contract.

Introduced 11/03/04

21.3 Forward contracts

The Foreign Exchange Equivalent for a forward contract including a future exchange associated with a cross currency Swap is at the discretion of the Participant either the:

- (a) face value of the contract; or
- (b) net present value of the contract.

Introduced 11/03/04

21.4 Other positions

The Foreign Exchange Equivalent of a foreign exchange position arising under any other Financial Instrument is as prescribed by ASX Clear.

Introduced 11/03/04

22. CALCULATION OF A CONVERTED NET OPEN POSITION

- (a) To calculate a net open position in a foreign currency, a Participant must aggregate in each currency all:
 - (i) Financial Instruments; and
 - (ii) other assets and liabilities,

other than Excluded Assets and foreign exchange contracts hedging Excluded Assets.
- (b) To convert a net open position to an equivalent Australian dollar amount a Participant must use:
 - (i) the Market Spot Exchange Rate; or
 - (ii) in the case where a foreign currency asset or liability is specifically matched or hedged by a forward currency contract, the rate of exchange stated in the forward currency contract.

Introduced 11/03/04

PART 4 – THE INTERNAL MODELS APPROACH

23 INTRODUCTION

- (a) Subject to the prior written approval of ASX Clear, a Participant may calculate its Position Risk Requirement using its own internal risk measurement system instead of, or in conjunction with, the prescribed methods set out in Parts 1 to 3 of Annexure 3.
- (b) ASX Clear may require independent verification, at the Participant's expense, of the Participant's compliance with the criteria set out in this Part 4 of Annexure 3.

Introduced 11/03/04

24 GENERAL CRITERIA

- (a) The use of an internal model will be conditional upon the prior written approval of ASX Clear. ASX Clear will only give its approval if at a minimum it is satisfied that:
 - (i) the Participant's risk management system is conceptually sound and is implemented with integrity;
 - (ii) the Participant has sufficient numbers of staff skilled in the use of sophisticated models not only in the trading area but also in the risk control, audit and back-office areas;
 - (iii) the Participant's models have a proven track record of reasonable accuracy in measuring risk; and
 - (iv) the Participant will regularly conduct stress tests as discussed in clause 28.
- (b) ASX Clear may require a period of initial monitoring and live testing of a Participant's internal model before it is used for supervisory capital purposes. Participants that wish to use their internal model must be able to participate in testing exercises to provide ASX Clear with any additional information required to satisfy ASX Clear of the adequacy of the model.
- (c) In addition to these general criteria, Participants using internal models for capital purposes will be subject to the requirements detailed in clauses 25 to 32.

Introduced 11/03/04

25 QUALITATIVE STANDARDS

- (a) There are a number of qualitative criteria that a Participant has to meet before it will be permitted to use an internal model. The extent to which a Participant

satisfies the qualitative criteria may influence the level at which ASX Clear sets the multiplication factor referred to in clause 27(j).

(b) The qualitative criteria are:

- (i) The Participant must have an independent risk control unit that is responsible for the design and implementation of the Participant's risk management system. The unit must produce and analyse daily reports on the output of the Participant's risk measurement model, including an evaluation of limit utilisation. This unit must be independent from business trading and other risk taking units and should report directly to senior management of the Participant.
- (ii) The unit must conduct a regular (at least monthly) back testing program. More detailed discussion of back testing is provided in clause 32.
- (iii) The Participant's board of directors and senior management must be actively involved in the risk control process and must regard risk control as an essential aspect of the business to which significant resources need to be devoted. In this regard, the daily reports prepared by the independent risk control unit must be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual traders and reductions in the Participant's overall risk exposure.
- (iv) The internal risk measurement model must be closely integrated into the day-to-day risk management process of the Participant. Accordingly, the output of the model must be an integral part of the process of planning, monitoring and controlling the Participant's market risk profile.
- (v) The risk measurement system must be used in conjunction with internal trading and exposure limits. While individual dealers' trading limits need not necessarily be expressed in terms of value-at-risk, trading limits should be related to the Participant's risk measurement model in a manner that is consistent over time and that is well understood by both traders and senior management.
- (vi) A routine and rigorous program of stress testing must be in place as a supplement to the risk analysis based on the day-to-day output of the Participant's risk measurement model. The results of stress testing exercises must be reflected in the policies and limits set by management and the board. The results of stress testing must be routinely communicated to senior management and, periodically, to the Participant's board.
- (vii) The Participant must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system. The Participant's risk measurement system must also be well documented.

- (viii) An independent review of the risk measurement system must be carried out regularly as part of the Participant's own internal audit process. This review must include both the activities of the business trading units and of the independent risk control unit. A review of the overall risk management process must take place at regular intervals and at least annually and a copy of the review report must be provided to ASX Clear annually. The review must specifically address, at a minimum:
- A. the scope of market risks captured by the risk measurement model;
 - B. the integrity of the management information system;
 - C. the accuracy and completeness of position data;
 - D. the verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;
 - E. the accuracy and appropriateness of volatility and correlation assumptions;
 - F. the accuracy of valuation and risk transformation calculations;
 - G. the verification of the model's accuracy through frequent back testing as described in clause 25(b)(ii) and in clause 32;
 - H. the approval process for risk pricing models and valuation systems used by front- and back-office personnel;
 - I. the validation of any significant change in the risk measurement process;
 - J. the adequacy of the documentation of the risk management system and process;
 - K. the organisation of the risk control unit; and
 - L. the integration of market risk measures into daily risk management.
- (ix) If the Participant wishes to use its risk measurement model to cover trading activities outside Australia, it must provide to ASX Clear, on an annual basis, an audit report(s) confirming that the risk management systems and controls in each overseas location are operating effectively. The report(s) must specifically address:
- A. whether all positions feeding into the model are monitored via a comprehensive limit structure, and adherence to the limits is monitored by a unit independent of the front office on a daily basis and in a timely manner;

- B. whether senior management both abroad and in Australia are aware and understand the scale of the risks being run, and are promptly informed of any limit breaches;
- C. whether limits are reviewed regularly and risks run are reported to the Participant's Risk Management Committee (or equivalent);
- D. whether controls are in place to ensure that all genuine trades (and only genuine trades) are recorded within the model in a timely manner, by a unit independent of the front office;
- E. whether the mathematics (software) of the model for deriving both revaluations and market risk are independent of front office revision. Any development of these models and the inclusion of new products in existing models should follow the same process as laid down for products in Australia;
- F. whether repricing inputs are obtained independently of the front office and whether this is done on a daily basis. In instances where these are particularly difficult to obtain (eg some option volatilities), a minimum standard would be to obtain independent inputs at least monthly (eg from screens, brokers, etc);
- G. whether the output from the models is reported back to Australia by a unit independent of the front office to a similar unit in Australia on a daily basis; and
- H. whether there are adequate disaster recovery plans in place so that the Participant is able to manage its exposures despite any disruption to the primary modeling system in any location.

Introduced 11/03/04

26 SPECIFICATION OF MARKET RISK FACTORS

A Participant's internal market risk measurement system must specify an appropriate set of market risk factors. The risk factors contained in a market risk measurement system must be sufficient to capture the risks inherent in the Participant's portfolio of on- and off-balance sheet trading positions.

Introduced 11/03/04

26.1 Interest Rates

- (a) There must be a set of risk factors corresponding to interest rates in each currency in which the Participant has interest rate sensitive on- or off-balance sheet positions.
- (b) The risk measurement system should model the yield curve using one of a number of generally accepted approaches. The yield curve should be divided

into various maturity segments and there will typically be one risk factor corresponding to each maturity segment. For material exposures to interest rate movements in the major currencies and markets, Participants must model the yield curve using a minimum of six risk factors.

- (c) The risk measurement system should incorporate separate risk factors to capture basis risk.

Introduced 11/03/04

26.2 Equity Prices

There must be risk factors corresponding to each of the equity markets to which the Participant is exposed.

Introduced 11/03/04

26.3 Exchange Rates (Including Gold)

There must be risk factors corresponding to the exchange rate between the domestic currency and each foreign currency to which the Participant is exposed.

Introduced 11/03/04

26.4 Commodity Prices

There must be risk factors corresponding to each of the commodity markets in which the Participant holds positions.

Introduced 11/03/04

27 QUANTITATIVE STANDARDS

Participants will have flexibility in devising the precise nature of their models, but the following minimum standards will apply for the purpose of calculating their capital charge. Individual Participants will have discretion to apply stricter standards.

- (a) “Value-at-risk” must be computed on a daily basis.
- (b) In calculating value-at-risk, a 99th percentile, one-tailed confidence interval is to be used.
- (c) In calculating value-at-risk, an instantaneous price shock equivalent to a movement in prices over 10 Trading Days is to be used, ie the minimum “holding period” must be 10 Trading Days. Participants may use value-at-risk numbers calculated according to shorter holding periods scaled up to 10 days by multiplying by the square root of the value obtained by dividing 10 by the number of days used (for the treatment of options, also see clause 27(h)).
- (d) The choice of historical observation period for calculating value-at-risk will be constrained to a minimum length of one year. For Participants that use a weighting scheme or other method for the historical observation period, the

weighted average time lag of the individual observations cannot be less than 6 months. ASX Clear may also require a Participant to calculate its value-at-risk using a shorter observation period if, in ASX Clear's judgement, this is justified by a significant upsurge in price volatility.

- (e) Participants must update their data sets no less frequently than once every 3 months and should also reassess them whenever market prices are subject to material changes.
- (f) No particular type of model is prescribed.
- (g) Participants will have discretion to recognise empirical correlations within and across broad risk categories provided that ASX Clear is satisfied that the Participant's system for measuring correlations is sound and implemented with integrity.
- (h) Participants' models must accurately capture the unique risks associated with options within each of the broad risk categories. The following criteria apply to the measurement of options risk:
 - (i) Participants' models must capture the non-linear price characteristics of option positions;
 - (ii) Participants are expected to ultimately move towards the application of a full 10 day price shock, as described in clause 27(c) above, to options positions or positions that display option-like characteristics. In the interim, ASX Clear may require Participants to adjust their capital measure for options risk through other methods, eg periodic simulations or stress testing; and
 - (iii) each Participant's risk measurement system must have a set of risk factors that captures the volatilities of the rates and prices underlying the option positions, ie vega risk. Participants with relatively large and/or complex options portfolios should have detailed specifications of the relevant volatilities. This means that Participants should measure the volatilities of options positions broken down by different maturities.
- (i) Each Participant must, on a daily basis, calculate its position risk requirement as the higher of:
 - (i) an average of the daily value-at-risk measures on each of the preceding 60 days, multiplied by a scaling factor (the total of a multiplication factor and a plus factor); and
 - (ii) its previous day's value-at-risk number.
- (j) The multiplication factor will be set by ASX Clear on the basis of its assessment of the quality of each Participant's risk management system, subject to an absolute minimum of 3. Only those Participants deemed by ASX Clear to satisfy adequately the qualitative and quantitative standards will be eligible for application of the minimum multiplication factor of 3. Participants will be required to add to this factor a "plus" directly related to the ex post performance

of the model. The plus factor will range from 0 to 1 based on the outcome of back testing. Clause 32 presents in detail the approach to be applied for back testing and the plus factor.

- (k) Participants using models will also be subject to a capital charge to cover the specific risk of interest rate related instruments and equity securities. The manner in which the specific risk capital charge is to be calculated is set out in clause 31.

Introduced 11/03/04

28 STRESS TESTING

- (a) Participants that use the internal models approach for calculating position risk requirements must have in place a comprehensive stress testing program. Stress testing to identify events or influences that could greatly impact on the value of trading portfolios is a key component of a Participant's assessment of its capital position.
- (b) Each Participant must combine the use of supervisory stress scenarios with an internally developed stress testing program that reflects the risk characteristics of the Participant's portfolio. Specifically, ASX Clear will ask Participants to provide information on stress testing in three broad areas, which are discussed in turn below.

Introduced 11/03/04

28.1 Supervisory Scenarios Requiring No Simulations By The Participant

Participants must report to ASX Clear information on the five largest daily losses experienced for the total Trading Book during the reporting period.

Introduced 11/03/04

28.2 Supervisory Scenarios Requiring A Simulation By The Participant

- (a) Participants must subject their portfolios to a series of standard stress scenarios stipulated by ASX Clear and provide ASX Clear with the results monthly.
- (b) A Participant may be required to evaluate the sensitivity of portfolio value to changes in the internal model's assumptions about correlations.

Introduced 11/03/04

28.3 Scenarios Developed By The Participant To Capture The Specific Characteristics Of Its Portfolio

- (a) In addition to the scenarios prescribed by ASX Clear, a Participant must develop its own stress tests which it identifies as most adverse based on the characteristics of its portfolio. Participants must provide ASX Clear with a description of the methodology used to identify scenarios and to carry out the stress tests.

- (b) The results of the stress tests must be reviewed periodically by senior management and must be reflected in the policies and limits set by management and the Board. Moreover, if the testing reveals particular vulnerability to a given set of circumstances, ASX Clear would expect the Participant to take prompt steps to manage those risks appropriately.

Introduced 11/03/04

29 MODEL REVIEW

In reviewing a Participant's internal models ASX Clear will, at a minimum, require assurance that:

- (a) the internal validation processes described in clause 25(b)(viii) are operating in a satisfactory manner;
- (b) the formulae used in the calculation process as well as for the pricing of options and other complex instruments are validated by a qualified unit, which in all cases should be independent from the trading area;
- (c) the structure of the internal models is adequate with respect to the Participant's activities and geographical coverage;
- (d) the results of the Participant's back testing of its internal measurement system (ie comparing value-at-risk estimates with profit and loss outcomes) ensure that the model provides a reliable measure of potential losses over time; and
- (e) data flows and processes associated with the risk measurement system are transparent and accessible. In particular, it is necessary that auditors or ASX Clear are in a position to have easy access, whenever they judge it necessary and under appropriate procedures, to the model's specifications and parameters.

Introduced 11/03/04

30 COMBINATION OF THE INTERNAL MODELS APPROACH AND THE PRESCRIBED METHODS SET OUT IN PARTS 1 TO 3 OF ANNEXURE 3

- (a) Unless a Participant's exposure to a particular risk factor is insignificant, the internal models approach will, in principle, require Participants to have an integrated risk measurement system that captures the broad risk factor categories (ie interest rates, exchange rates (which may include gold), equity prices and commodity prices, with related options volatilities being included in each risk factor category). Thus, a Participant that starts to use an internal model for one or more risk factor categories will be expected, over time, to extend the model to all its significant market risks. A Participant which has developed a model will not be able to revert to measuring risk using a prescribed method, except with ASX Clear's prior approval.
- (b) The following conditions will apply to Participants using such combinations:

- (i) each broad risk factor category must be assessed using a single approach (either internal model or prescribed method), ie no combination of the two methods will in principle be permitted within a risk category. However, Participants may incur risks in positions which are not captured by their models, for example, in minor currencies or in negligible business areas. Such risks should be measured according to the prescribed methods described in Parts 1 to 3 of this Annexure 3;
- (ii) all of the criteria laid down in this Part 4 of Annexure 3 will apply to the model being used;
- (iii) Participants may not modify the combination of the two approaches they use without justifying to ASX Clear that they have a good reason for doing so;
- (iv) no element of market risk may escape measurement, ie exposures to all risk factors, whether calculated according to a prescribed method or an internal model, must be captured; and
- (v) the capital charges assessed under the prescribed methods and the internal model approach must be summed.

Introduced 11/03/04

31 TREATMENT OF SPECIFIC RISK

- (a) Participants using internal models will be permitted to base their specific risk capital charge on modelled estimates if the models meet all of the qualitative and quantitative requirements for general market risk models as well as the additional criteria set out below.

Participants which are unable to meet these additional criteria will be required to calculate the specific risk capital charge using the equity building block method and the debt building block method.

- (b) Specific risk is decomposed into two components: idiosyncratic risk, and event and default risk. Participants are required to hold capital against both types of specific risk.
- (c) In order to be used as a means of calculating the capital charge for the idiosyncratic risk component of specific risk, a Participant's specific risk model must:
 - (i) explain the historical price variation in the portfolio;
 - (ii) demonstrably capture concentration;
 - (iii) be robust to an adverse environment; and
 - (iv) be validated through back testing aimed at assessing whether idiosyncratic risk is being accurately captured.

- (d) In addition, the Participant must be able to demonstrate that it has methodologies in place which allow it to adequately capture event and default risk for its Trading Book debt and equity positions.
- (e) If a Participant meets the criteria set out above for idiosyncratic risk but does not adequately model event and default risk, the Participant will be required to add a surcharge to the internal model capital charge. An additional factor of one would be added to the scaling factor and applied to the estimate of specific risk until such time as a Participant can demonstrate that the methodologies it uses adequately capture event and default risk. Once a Participant is able to demonstrate this, the additional factor would be reduced to zero. The surcharge does not replace the requirement for a plus factor based on back testing results.
- (f) For Participants applying the surcharge, the total capital requirement will equal the scaling factor multiplied by the internal model's general and specific risk measure plus a surcharge in the amount of either:
 - (i) the specific risk portion of the value-at-risk measure which should be separated from the model's estimate of general market risk; or
 - (ii) the value-at-risk measures of sub-portfolios of debt and equity positions that contain specific risk. (This would apply to sub-portfolios containing positions that would be subject to specific risk under the equity building block method and the debt building block method.)
- (g) Participants using internal models of specific risk are required to conduct back testing aimed at assessing whether specific risk is being accurately captured. To validate its specific risk estimates a Participant should perform separate back tests using daily data on sub-portfolios subject to specific risk.
- (h) Participants are required to have in place a process to analyse exceptions identified through the back testing of specific risk. This process is intended to serve as the fundamental way in which Participants correct their models of specific risk in the event that they become inaccurate.
- (i) There will be a presumption that models that incorporate specific risk are unacceptable if the results at the sub-portfolio level produce a number of exceptions commensurate with the red zone defined in clause 32. A Participant with an unacceptable specific risk model is expected to take immediate action to improve the model and to ensure that there is a sufficient capital buffer to absorb the risk that the back test showed had not been adequately captured.

Introduced 11/03/04

32 FRAMEWORK FOR THE USE OF BACK TESTING

- (a) This section presents the framework for incorporating back testing into the internal models approach to position risk requirements. It represents an elaboration of clause 27(j).

- (b) The Participant must calculate the number of times that the trading losses were larger than the value-at-risk measures (termed “exceptions”) using the most recent 12 months of data. This must be done no less frequently than monthly.
- (c) The value-at-risk measure to be used for back testing purposes must be based on a 99 per cent level of confidence and a one day holding period.
- (d) The Participant must agree with ASX Clear the profit and loss approach to be used for regulatory back testing purposes.
- (e) Participants must document all of the exceptions generated from their ongoing back testing program, including an explanation for the exception.
- (f) The first formal accounting of exceptions under the back testing program will occur one year after model recognition is granted.
- (g) Using the most recent 12 months of data yields approximately 250 daily observations. ASX Clear will use the number of exceptions (out of 250) generated by the Participant’s model as the basis for determining the plus factor to be applied. The supervisory response is based on a three-zone approach described below and the applicable plus factors are set out in Table 1.8 of Schedule 5.
 - (i) The green zone is where there are 4 or fewer exceptions in a sample of 250 outcomes.
 - (ii) The yellow zone is where there are 5 to 9 exceptions in a sample of 250 outcomes. Where a Participant’s back testing results are in the yellow zone, ASX Clear may request additional information (eg disaggregated back testing results, explanations for the exceptions) to assist in determining the supervisory response. The plus factors for the yellow zone as set out in Table 1.8 of Schedule 5 are not meant to be purely automatic. However, to keep the incentives aligned properly, back testing results in the yellow zone should generally be presumed to imply an increase in the scaling factor unless the Participant can demonstrate that such an increase is not warranted. ASX Clear will decide whether or not to apply increases in the Participant’s capital requirement by imposing the plus factor, or possibly to disallow the use of an internal model.
 - (iii) The red zone is where there are 10 or more exceptions in a sample of 250 outcomes. Where a Participant’s back testing results are in the red zone, the plus factor of one will automatically apply. ASX Clear will also investigate the reasons why the Participant’s model produced such a large number of exceptions, and will require the Participant to begin work on improving its model immediately. Finally, in the case of severe problems with the basic integrity of the model, ASX Clear may disallow the use of the model for capital purposes altogether.

Introduced 11/03/04

ANNEXURE 4 UNDERWRITING RISK REQUIREMENT

Annexure 4 and clause 7 of Annexure 1 will be inserted and effective on a date to be advised.

Introduced 11/03/04

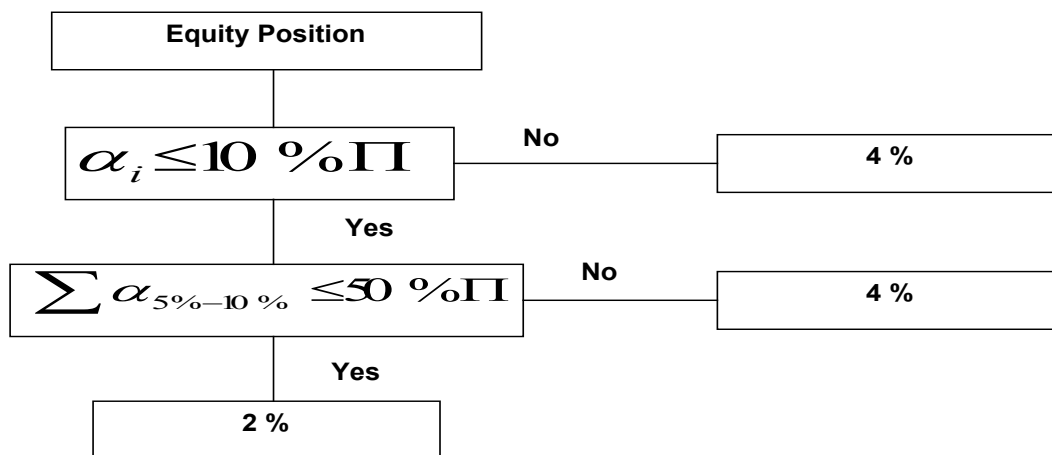
ANNEXURE 5 TABLES

1. POSITION RISK

Table 1.1

Equity Position Risk Factors							
Position In:	Underlying						Option
Single Equity	Recognised Market Index (see Table 1.6)			Non Recognised Market Index			Implied Volatility
	Standard Method	Building Block Method		Standard Method	Building Block Method		
		General Risk	Specific Risk		General Risk	Specific Risk	
	12%	8%	4% ¹	16%	8%	8%	25%
Index	8% ²	8%	0% ²	16% ²	8%	8%	25%

Notes: ¹ The specific risk Position Risk Factor for a single Equity may be reduced to 2% if:



Π = gross value of each country portfolio

α_i = Net Position in equity i

$\alpha_{5\%-10\%}$ = Positions in individual equities that represent more than 5% and up to 10% of the gross value of the portfolio

Both of the “tests” noted above must be satisfied in order for the Position Risk Factors to be reduced to 2 % for any equity position held. Hence if any one net position is greater than 10% of the gross value of each country portfolio then NO net position can have a position risk factor of 2%.

² For positions not broken down into constituent Equities, otherwise the single Equity percentages apply.

Table 1.2

Debt Position Risk Factors (see also Table 1.3 below)							
Time Band		Position Risk Factors - %					
		Standard Method			Building Block Method (General Risk)		
Coupons		Gov't	Qualifying	Other	Zone	Maturity Method	Duration Method (assumed yield change)
≥ 3%	< 3% (or Duration Method)						
0 - 1 mth	0 - 1 mth	0.00	0.25	8.00	1	0.00	1.00
> 1 - 3 mths	> 1 - 3 mths	0.20	0.45	8.20		0.20	1.00
> 3 - 6 mths	> 3 - 6 mths	0.40	0.65	8.40		0.40	1.00
> 6 - 12 mths	> 6 - 12 mths	0.70	1.70	8.70		0.70	1.00
> 1 - 2 yrs	> 1 - 1.9 yrs	1.25	2.25	9.25	2	1.25	0.90
> 2 - 3 yrs	> 1.9 - 2.8 yrs	1.75	3.35	9.75		1.75	0.80
> 3 - 4 yrs	> 2.8 - 3.6 yrs	2.25	3.85	10.25		2.25	0.75
> 4 - 5 yrs	> 3.6 - 4.3 yrs	2.75	4.35	10.75	3	2.75	0.75
> 5 - 7 yrs	> 4.3 - 5.7 yrs	3.25	4.85	11.25		3.25	0.70
> 7 - 10 yrs	> 5.7 - 7.3 yrs	3.75	5.35	11.75		3.75	0.65
> 10 - 15 years	> 7.3 - 9.3 yrs	4.50	6.10	12.50		4.50	0.60
> 15 - 20 years	> 9.3 - 10.6 yrs	5.25	6.85	13.25		5.25	0.60
20+ years	> 10.6 - 12 yrs	6.00	7.60	14.00		6.00	0.60
	> 12 - 20 yrs	8.00	9.60	16.00		8.00	0.60
	20+ yrs	12.50	14.10	20.50	12.50	0.60	
Option Implied Volatility - All Debt Positions		25%					

In using Table 1.2 for any Debt Derivative, a Participant must use the Position Risk Factors specified in the 'government' column unless the value of the Debt Derivative is derived from:

- (a) a Qualifying Debt Instrument, in which case the Participant must use the Position Risk Factors specified in the 'qualifying' column; or
- (b) a non-Government Debt Instrument, in which case the Participant must use the Position Risk Factors specified in 'other' column.

Table 1.3

Debt Building Block Method – Specific Risk Position Risk Factors					
Government	Government	Qualifying			Other
0-12 mths	over 12 mths	0-6 mths	6-24 mths	over 24 mths	
0.00%	0.00%	0.25%	1.00%	1.60%	8.00%

Table 1.4

Debt Building Block Method – General Risk Time Band Matching Factors (TBMF)			
		Matching Factor	
		Maturity Method	Duration Method
Same time band	(TBMF)	10%	5%
Zone 1	(ZMF)	40%	40%
Zone 2	(ZMF)	30%	30%
Zone 3	(ZMF)	30%	30%
Positions in adjacent zones	(AZMF)	40%	40%
Positions spanning Zone 1 and Zone 3	(NAZMF)	100%	100%

Table 1.5

Rated Investment Grades		
	Minimum Ratings	
	Securities	Money Market Obligations
For all issuers		
Moody's Investor Services	Baa3	P3
Standard & Poors Corporation	BBB-	A3
Fitch IBCA Ltd	BBB-	F-3
For all banks, building societies and subsidiaries of banks (not otherwise eligible as Qualifying Debt Instruments)		
Thomson Financial Bank Watch	BBB-	TBW-3
For Canadian Issuers		
Canadian Bond Rating Service	B++low	A-3
Dominion Bond Rating Service	BBB low	R-2
For Japanese Issuers		
Japan Credit Rating Agency Ltd	BBB-	J-2
Nippon Investor Services Inc	BBB-	a-3
The Japan Bond Research Institute	BBB-	A-2
Mikuni & Co	BBB	M-3
Fitch Investors Services Inc	BBB-	F-3
For United States Issuers		
Duff & Phelps Inc	BBB-	3
Fitch Investors Services Inc	BBB-	F-3

Table 1.6

Recognised Market Indexes			
Country	Index	Country	Index
Australia	S&P/ASX 200	Netherlands	EOE 25
Austria	ATX	Spain	IBEX 35
Belgium	BEL 20	Sweden	OMX
Canada	TSE 35	Switzerland	SMI
France	CAC 40	UK	FTSE 100
Germany	DAX	UK	FTSE mid-250
Hong Kong	Hang Seng	USA	S&P 500
Italy	MIB 30		
Japan	Nikkei 225		

Table 1.7

Foreign Exchange Position Risk Factors	
	Standard Method
Foreign Exchange Spot and Forward – All Currencies	8%
Options Implied Volatility – all Currencies	25%

Table 1.8

Internal Models Approach – Back Testing Plus Factors		
	Number of Exceptions	Plus Factor
Green Zone	4 or fewer	0.00
Yellow Zone	5	0.40
	6	0.50
	7	0.65
	8	0.75
	9	0.85
Red Zone	10 or more	1.00

2. COUNTERPARTY RISK

Table 2.1

Risk Weightings	
	Counterparty
Central Bank	0%
Central and State Government	10%
Banks Local Governments Approved Deposit Taking Institutions (other than Banks) Risk Based Capital Requirements – ASX Clear Participants – ASX Market Participants	20%
Approved Institutions	50%
Other	100%

Amended 19/02/24

In Table 2.1, references to Central Banks and Governments are references to OECD Central Banks and Governments. Non-OECD Central Banks and Governments are within the ‘other’ category of risk weighting.

Table 2.2

Potential Credit Exposure Factors			
Remaining Time to Maturity	Equity	Debt	Foreign Exchange
One year or less	6.0%	0.0%	1.0%
Over one year to 5 years	8.0%	0.5%	5.0%
Over 5 years	10.0%	1.5%	7.5%

3. OTHER

Table 3.1

Recognised Non European Regulator	
Country	Regulator
Australia	Australian Securities Exchange Limited
Canada	Alberta Stock Exchange Montreal Exchange Toronto Stock Exchange Vancouver Stock Exchange Investment Dealers Association of Canada
Hong Kong	Hong Kong Monetary Authority Hong Kong Securities and Futures Commission
Japan	Financial Services Agency
Singapore	Monetary Authority of Singapore Stock Exchange of Singapore
South Africa	Bond Exchange of South Africa Johannesburg Stock Exchange South African Futures Exchange
United States	Securities and Exchange Commission Commodity and Futures Trading Commission

Table 3.2

Recognised European Regulator	
Country	Regulator
Austria	Bundesministerium für Finanzen (Federal Ministry of Finance, Banking, Stock Exchange and Capital Market Supervision) Bundes-Wertpapieraufsicht (Austrian Securities Authority)
Belgium	Commission Bancaire et Financière
Finland	Financial Supervision Authority
France	Comité des établissements de crédit et des entreprises d'investissements
Germany	Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority)
Greece	The Bank of Greece The Capital Market Commission
Iceland	Central Bank of Iceland
Ireland	Central Bank of Ireland
Italy	Banca d'Italia
Liechtenstein	Dienststelle für Bankenaufsicht
Luxembourg	Institute Monétaire Luxembourgeois
Netherlands	Securities Board of the Netherlands
Norway	Kredittilsynet (the Banking, Insurance and Securities Commission of Norway)
Portugal	Banco de Portugal (Central Bank)
Spain	Banco de Espana (for Banks and Credit Institutions) Comision Nacional del Mercado de Valores
United Kingdom	Financial Services Authority

End of Document