

BANKING GUIDANCE NOTE (BGN 6.0)

Foreign Exchange Risk Management

31st March 2006



Financial Supervision Commission Bainteachas Airgid

Contents **Page No.**

Part 1 – Banks incorporated in the Isle of Man

1	Rationale for Foreign Exchange Risk Management	2
2	Overview of the Commission’s Approach to Foreign Exchange Risk Management	4
3	Foreign Exchange Risk Management Policy	4
4	Procedures and Systems	5
5	Calculation of the Net Open Position	6
6	Valuation	7

Part 2 – Banks operating in or from the Isle of Man which are incorporated outside the Isle of Man (“branches”)

1	Rationale for Foreign Exchange Risk Management	8
2	Overview of the Commission’s Approach to Foreign Exchange Risk Management	10
3	Foreign Exchange Risk Management Policy	10
4	Procedures and Systems	10

Appendix 1- Glossary

Part 1 – Banks incorporated in the Isle of Man

1. Rationale for Foreign Exchange Risk Management

- 1.1 The foreign exchange market is arguably the largest and most liquid of the international markets, and large and rapid movements in exchange rates are commonplace. In order to minimise the possibility of financial loss, it is therefore essential that banks identify, measure and manage their foreign exchange risk effectively.
- 1.2 Foreign exchange risk is not confined to proprietary positions taken by a bank and client driven transactions, but can also arise from known profit flows in foreign currency, and provisions for bad debts denominated in foreign currency. It is important that these exposures are identified and, where necessary, hedged, on a timely basis.
- 1.3 Banks are exposed to a number of different risks in the conduct of foreign exchange and general business, and these may be categorised as follows. This list is not exhaustive and is for guidance purposes only:

a) ***Exchange rate risk (open position)***

The risk that the bank may suffer losses as a result of adverse exchange rate movements during a period in which it has an open position in a currency. Where the value of asset/inflow exposures in one currency is not equal to the value of liability/outflow exposures in that currency this is described as an ***open position***. Open positions may be short (liabilities exceed assets) or long (assets exceed liabilities). This is a simplistic definition, and the components of the calculation of an open position are given below. Banks with a short open position in a currency are exposed to the risk that the currency might appreciate, while those with a long open position in a currency are exposed to the risk that the currency might depreciate.

b) ***Interest rate risk***

Arising from unmatched forward foreign exchange transactions.

c) ***Settlement risk***

Also known as time zone risk, this is a form of credit risk that arises from transactions where the currencies settle in different time zones. For example, where a bank enters into a transaction to sell Australian Dollars and buy US Dollars, they are obliged to pay AUD to the counterparty some 15 hours before they are able to receive their USD in settlement. *

* A transaction is not complete until settlement has taken place in the latest applicable time zone. This is also referred to as "Herstatt Risk".

d) **Credit risk**

Arising from the failure or default of a counterparty. Technically, this is a credit risk where only one side of the transaction has settled (see settlement risk above). If a counterparty fails before any settlement of a contract occurs, the risk is limited to the difference between the contract price and the current market price (i.e. an exchange rate risk).

e) **Country risk**

Essentially a form of credit risk arising from either the currency of the trade or the centre in which the counterparty is situated rather than the counterparty itself. However, there are implications for foreign exchange transactions. In particular, many investment managers buy stocks in emerging markets where there may be some political risk, and will instruct the treasury department to buy or sell the currency according to the trade. In the event of sanctions being imposed by the government of that country, or an international agency such as the United Nations, banks may not be able to sell balances or deliver currency in settlement of trades already completed.

- 1.4 The most common risk faced by banks on the Isle of Man is exchange rate risk, which emanates from two distinct areas:
- a) FX business transacted with clients and counterparties, including proprietary trading
 - b) Profits or losses arising from the bank's foreign currency deposit and loan books, and operational cashflows in foreign currency.
- 1.5 **The open position risk** arising from client business is relatively easy to identify and measure. However, it is essential that all deals be processed as soon as possible after the trade has been agreed with the client and that authorised dealing personnel are advised of deals of a material size.
- 1.6 **Foreign exchange risk** positions arising from a bank's profit and loss account are more difficult to assess accurately. However those banks with material profit flows in foreign currency should carry out an assessment as to the benefits of hedging their risk. As such foreign exchange risk will normally emanate from outside the treasury area and, as a matter of best practice, the decision to hedge or not should be taken at a minuted Management or ALCO meeting.
- 1.7 **Interest rate risk** arises from any unmatched forward foreign exchange positions the bank may have. (The only true foreign exchange risk incurred here is the difference between the spot and forward trade in each currency. Should a bank buy spot Sterling against US Dollars and sell the identical amount of Sterling, say 3 months forward, the foreign exchange risk is the difference between the spot and forward US Dollar amounts. However, the bank will

have a long GBP, short USD forward foreign exchange position. A movement of interest rates in either of these currencies over the period of the forward trade will generate a revaluation profit or loss). Although interest rate markets are not as volatile as foreign exchange, it is important that banks measure and monitor all risks.

- 1.8 **Settlement, credit, and country risks** normally only materialise where a bank deals with customers and counterparties where physical cash payments are required to settle the trade. These risks are inherent forms of credit risk arising from foreign exchange trades, and limits would normally be proposed to the Board via the credit approval process, under advice from the Treasury or ALCO.

2. Overview of the Commission's Approach to Foreign Exchange Risk Management

- 2.1 The Commission requires all banks to have a prudent foreign exchange risk policy and appropriate systems in place to measure and monitor foreign exchange risk, and to ensure that the policy is adhered to. The policy should be approved by the Board. The Commission recognises that appropriate systems and controls for foreign exchange risk will vary with the scale, nature and complexity of a bank's activities.
- 2.2 Whilst the Commission does not seek to impose specific limits for foreign exchange risk exposure, banks are not expected to assume risk that, in the event of an adverse movement in foreign exchange rates of 10%, would constitute a potential cost of in excess of 10% of a bank's LECB.
- 2.3 Foreign exchange risk will be assessed for capital adequacy purposes and a 100% weighting will apply on the net reportable open position.
- 2.4 Banks are expected to carry out periodic (minimum six monthly) stress testing exercises to assess the potential cost of a shock 20% movement in exchange rates, as appropriate to the business.

3. Foreign Exchange Risk Management Policy

- 3.1 The foreign exchange risk management policy should clearly define instruments in which the bank is authorised to trade, risk limits commensurate with the bank's activities, regularity of reports to management, and who is responsible for producing such reports.

The policy should be reviewed on a regular basis, normally at least annually, to ensure that it remains appropriate.

- 3.2 The main points that need to be considered when drawing up a policy are given below:

- a) Open position limits commensurate with customer driven turnover, and the bank's appetite for market risk
- b) Separate limits should be allocated for each currency, together with an "overall cap" limit. Banks that assume risk on a proprietary trading basis should also introduce measures to limit intraday risk (normally a maximum of five times the overnight cap limit)
- c) Where a bank trades with counterparties other than members of their own group located in Zone A countries, settlement and country limits should be addressed and clearly defined
- d) Forward foreign exchange mismatch limits
- e) List of approved instruments
- f) Use of foreign exchange derivatives
- g) The expertise and experience of authorised personnel
- h) Authority to trade with counterparties other than group companies (where appropriate)
- i) Monitoring and reporting systems
- j) Recording and follow up of limit excesses
- k) Impact on P&L of an adverse 10% movement in exchange rates on maximum permitted exposure
- l) Imposition of a "stop loss" limit to restrict or prevent any further trading other than client deals and hedging
- m) Segregation of duties
- n) Trading mandates for authorised personnel
- o) Limitation on out of hours trading
- p) List of authorised brokers (if applicable)
- q) Code of Conduct for authorised personnel

4. Procedures and Systems

- 4.1 The Commission requires banks to monitor their foreign exchange risk on a frequent and timely basis. The Commission would expect banks that assume any foreign exchange risk to be in a position to measure their positions on an ongoing basis and to report to management daily. It follows from this that a bank must have adequate procedures and systems for monitoring foreign exchange risk. This requires:
- a) A clear allocation of the responsibility for measuring and reporting foreign exchange risk
 - b) The maintenance of reliable systems that can produce accurate reports promptly
 - c) Active senior management involvement in, and clearly allocated responsibility for, foreign exchange risk reporting
 - d) Regular reporting to group or parent companies
- 4.2 The system that produces the foreign exchange risk reports should be linked to the bank's core systems, and be capable of being reconciled to core data.
- 4.3 Reports should follow the principles of good management information, for example:

- a) Clarity
- b) Highlight key information, in particular breaches or exceptions
- c) Highlight unutilised limit capacity
- d) Use of an exception based commentary

5. Calculation of the Net Open Position

5.1 Components

A bank should calculate the **net open position** in each currency, including gold, but excluding the base currency.

- a) For the definition of an **open position**, see the section on rationale
- b) Normally, a bank's **base currency** is the currency in which its capital is predominately denominated and in which its statutory accounts are reported:
 - (i) Occasionally, it may be appropriate for a bank to use a currency other than Sterling as a base currency for the assessment of FX risk. In such cases, the Sterling net open position would also have to be calculated. However in such cases the prior permission of the Commission should be sought.

5.2 The **net open position** is the sum of the following elements:

- a) The **net spot position**:
 - (i) This is the sum of all assets (net of provisions) less all liabilities, including accrued interest.
- b) The **net forward position**:
 - (i) This is the sum of all amounts to be received less all amounts to be paid under forward FX and gold transactions, including currency and gold futures and the principal on currency swaps not included in the spot position
 - (ii) Derived future interest flows arising from interest arbitrage operations are to be included here.
- c) Irrevocable guarantees, and similar instruments that are certain to be called.
- d) Profits (net value of income and expense accounts) held in the currency in question, including any specific/individual provision for a bad or doubtful debt in the currency.

5.3 Certain positions of a structural or non-banking nature may be excluded from the calculation of the net open position. The prior permission of the Commission should be sought:

- a) Positions that are taken deliberately to hedge against the effects of exchange rate movements on the capital adequacy of the bank
 - b) Investments in overseas subsidiaries, which are fully deducted from an bank's capital for capital adequacy purposes
 - c) Any position that has been deducted from capital.
- 5.4 Composite currencies (such as Special Drawing Rights) should be regarded as individual currencies. Banks that hold a position in a composite currency, and hedge the risk by trading in the component currencies may apply to the Commission on an exceptional basis for permission to net these transactions.
- 5.5 Cross-currency swaps should be treated as a combination of a long position in the currency received and a short position in the currency paid.

6. Valuation

When calculating the local currency value of instruments or positions, the following practices should be adopted, as appropriate to the business:

- a) A bank's net position arising from customer and other trading activities should be calculated on a daily basis. The net overall open position (Form SR-4, Section 1, column 8) should normally be calculated on a weekly basis as a minimum
- b) Banks should account for revaluation profit and loss on their residual positions on a monthly basis as a minimum
- c) Closing mid market rates should be used. Ideally, these rates should be obtained, or, as a minimum, independently verified by staff other than authorised dealing personnel. Local currency amounts should be translated into base currency using prevailing closing mid-market spot rates
- d) Forward transactions should be revalued at prevailing outright mid-market rate for the outstanding period to settlement
- e) Other appropriate FX related contracts should be revalued on a mark to market basis.

Part 2 – Banks operating in or from the Isle of Man which are incorporated outside the Isle of Man (“branches”)

1. Rationale for Foreign Exchange Risk Management

- 1.1 The foreign exchange market is arguably the largest and most liquid of the international markets, and large and rapid movements in exchange rates are commonplace. In order to minimise the possibility of financial loss, it is therefore essential that banks identify, measure and manage their foreign exchange risk effectively.
- 1.2 Foreign exchange risk is not confined to proprietary positions taken by a bank and client driven transactions, but can also arise from known profit flows in foreign currency, and provisions for bad debts denominated in foreign currency. It is important that these exposures are identified and, where necessary, hedged, on a timely basis.
- 1.3 Banks are exposed to a number of different risks in the conduct of foreign exchange and general business, and these may be categorised as follows. This list is not exhaustive and is for guidance purposes only:

a) ***Exchange rate risk (open position)***

The risk that the bank may suffer losses as a result of adverse exchange rate movements during a period in which it has an open position in a currency. Where the value of asset/inflow exposures in one currency is not equal to the value of liability/outflow exposures in that currency this is described as an ***open position***. Open positions may be short (liabilities exceed assets) or long (assets exceed liabilities). This is a simplistic definition, and the components of the calculation of an open position are given below. Banks with a short open position in a currency are exposed to the risk that the currency might appreciate, while those with a long open position in a currency are exposed to the risk that the currency might depreciate.

b) ***Interest rate risk***

Arising from unmatched forward foreign exchange transactions.

c) ***Settlement risk***

Also known as time zone risk, this is a form of credit risk that arises from transactions where the currencies settle in different time zones. For example, where a bank enters into a transaction to sell Australian Dollars and buy US Dollars, they are obliged to pay AUD to the counterparty some 15 hours before they are able to receive their USD in settlement. *

* A transaction is not complete until settlement has taken place in the latest applicable time zone. This is also referred to as “Herstatt Risk”.

d) **Credit risk**

Arising from the failure or default of a counterparty. Technically, this is a credit risk where only one side of the transaction has settled (see settlement risk above). If a counterparty fails before any settlement of a contract occurs, the risk is limited to the difference between the contract price and the current market price (i.e. an exchange rate risk).

e) **Country risk**

Essentially a form of credit risk arising from either the currency of the trade or the centre in which the counterparty is situated rather than the counterparty themselves. However, there are implications for foreign exchange transactions. In particular, many investment managers buy stocks in emerging markets where there may be some political risk, and will instruct the Treasury department to buy or sell the currency according to the trade. In the event of sanctions being imposed by the government of that country, or an international agency such as the United Nations, banks may not be able to sell balances or deliver currency in settlement of trades already completed.

- 1.4 The most common risk faced by banks on the Isle of Man is exchange rate risk, which emanates from two distinct areas:
- a) FX business transacted with clients and counterparties, including proprietary trading
 - b) Profits or losses arising from the bank's foreign currency deposit and loan books, and operational cashflows in foreign currency.
- 1.5 **The open position risk** arising from client business is relatively easy to identify and measure. However, it is essential that all deals be processed as soon as possible after the trade has been agreed with the client and that authorised dealing personnel are advised of deals of a material size.
- 1.6 **Foreign exchange risk** positions arising from a bank's profit and loss account are more difficult to assess accurately. However those banks with material profit flows in foreign currency should carry out an assessment as to the benefits of hedging their risk. As such foreign exchange risk will normally emanate from outside the treasury area and, as a matter of best practice, the decision to hedge or not should be taken at a minuted Management or ALCO meeting.
- 1.7 **Interest rate risk** arises from any unmatched forward foreign exchange positions the bank may have. (The only true foreign exchange risk incurred here is the difference between the spot and forward trade in each currency. Should a bank buy spot Sterling against US Dollars and sell the identical amount of Sterling say 3 months forward, the foreign exchange risk is the difference between the spot and forward US Dollar amounts. However, the bank will have a long GBP, short USD forward foreign exchange position. A movement

of interest rates in either of these currencies over the period of the forward trade will generate a revaluation profit or loss). Although interest rate markets are not as volatile as foreign exchange, it is important that institutions measure and monitor all risks.

- 1.8 **Settlement, credit, and country risks** normally only materialise where a bank deals with customers and counterparties where physical cash payments are required to settle the trade. These risks are inherently forms of credit risk arising from foreign exchange trades, and limits would normally be proposed to the Board via the credit approval process, under advice from the Treasury or ALCO.

2. **Overview of the Commission's Approach to Foreign Exchange Risk Management**

The Commission requires all branches to be subject to a prudent foreign exchange risk policy and have appropriate systems in place to measure and monitor foreign exchange risk. The policy should be reviewed annually by senior management. The Commission recognises that appropriate systems and controls for foreign exchange risk will vary with the scale, nature and complexity of a branch's activities, and that the branch is likely to be part of the wider policies and procedures of the bank.

3. **Foreign Exchange Risk Management Policy**

- 3.1 Senior management of the branch should be aware of the foreign exchange risk policy of the bank and any reporting and monitoring requirements with which it must comply.

The policy should be reviewed on a regular basis by senior management, normally at least annually, to ensure that it remains appropriate.

- 3.2 The foreign exchange risk management policy should take into account the nature of the branch's business and the various types of foreign exchange risk that arise from it.

4. **Procedures and Systems**

- 4.1 The Commission requires branches to monitor their foreign exchange risk on a frequent and timely basis. The Commission would expect branches that assume any foreign exchange risk to be in a position to measure their positions on an ongoing basis and to report to management daily. Such reporting and monitoring may be performed at the bank rather than the branch itself. It follows from this that a bank must have adequate procedures and systems for monitoring foreign exchange risk. This requires:

- a) A clear allocation of the responsibility for measuring and reporting foreign exchange risk within the group
 - b) The maintenance of reliable systems that can produce accurate reports promptly
 - c) Active senior management involvement in, and clearly allocated responsibility for, foreign exchange risk reporting
 - d) Regular reporting to/from the branch.
- 4.2 The system that produces the foreign exchange risk reports should be linked to the bank's core systems, and be capable of being reconciled to core data.
- 4.3 Reports should follow the principles of good management information, for example:
- a) Clarity
 - b) Highlight key information, in particular breaches or exceptions
 - c) Highlight unutilised limit capacity
 - d) Use of an exception based commentary

Appendix I – Glossary

“ALCO” means an Asset and Liability Committee.

“bank” is the Isle of Man incorporated bank (part 1), or the head office, or otherwise as applicable, of the branch (part 2).

“branch” means a branch in the Isle of Man of a bank incorporated outside the Isle of Man.

“large exposures capital base” (“LECB”) is equivalent to Adjusted Capital Base as calculated on form SR-2A and is the sum of allowable Tier 1 and Tier 2 capital, less appropriate deductions. The calculation is usually performed annually and is based on the previous year’s audited financial statements and should be agreed with the Commission for the next financial year.