Guidance Note 3/03

Undertakings for Collective Investment in Transferable Securities (UCITS)
Financial Derivative Instruments

Background and Overview

Regulation 45 of the European Communities (UCITS) Regulations 2003 provides that a UCITS may invest in financial derivative instruments ("FDI"). UCITS are permitted to use FDI as part of their general investment policies as well as for hedging. A consequence of this is that UCITS must establish an extensive system of risk limitation in order to ensure that the risks involved in using FDI are properly managed, measured and monitored on an ongoing basis. This involves designing, implementing and documenting a comprehensive risk management process ("RMP") in order to meet the key requirement of investor protection.

This Guidance Note clarifies the treatment of FDI in UCITS in order to ensure that there is a greater understanding of the requirements of the Financial Regulator. As the commercial use of FDI and related risk management is constantly evolving, guidance in this area will similarly evolve and change to respond to meet new market developments.

Relevant Legislation

The following is a list of the key legislation and guidance in this area:

- European Communities (UCITS) Regulations 2003 ("the Regulations")
- Council Directive 2001/108/EC ("the Directive" that amends Council Directive 85/611/EC – the UCITS Directive)
- Council Directive 2007/16/EC ("the Eligible Assets Directive" which clarifies certain definitions of Council Directive 85/611/EC
- European Commission Recommendation 2004/383/EC on the use of financial derivative instruments for undertakings for collective investment in transferable securities (UCITS) ("the Commission Recommendation")
- CESR's guidelines concerning eligible assets for investment by UCITS ref: CESR/07-044 ("CESR's guidelines")
- Notice UCITS 9 – Investment Restrictions
- Notice UCITS 10 – Financial Derivative Instruments

- Guidance Note 1/00 – Valuation of the Assets of Collective Investment Schemes
- Guidance Note 2/07 – Financial Indices
- Guidance Note 3/07 – Structured Products and Complex Trading Strategies – Prospectus Disclosure Requirements

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1. Global Exposure and Leverage

1.1 Global Exposure - Overview

For the purposes of this Guidance Note, *Global Exposure* is understood to be a measure of incremental exposure[1] and leverage generated by using FDI . Leverage may also be generated through the use of features such as multiplication factors embedded in total return swaps and therefore must also be taken into account in calculating global exposure. A UCITS *global exposure* will be calculated using either a non-sophisticated or sophisticated risk measurement approach as described below.

In determining how a UCITS calculates its global exposure, it should define itself in its RMP as being either *sophisticated* or *non-sophisticated*, with the rationale for so doing. In making this determination, the UCITS must be satisfied that the classification is reflective of the risk profile of the strategies pursued. For example, a non-sophisticated UCITS will only use a limited number of simple derivative instruments for non-complex hedging or investment strategies. The Financial Regulator will review the UCITS RMP to ensure that the rationale for self-classification is appropriate.

- A non-sophisticated UCITS may opt to use either the *commitment approach* or an *advanced risk-measurement approach* as described in the "Advanced Risk Measurement Approaches " section below.
- A sophisticated UCITS must use an *advanced risk-measurement approach*.

The measurement and monitoring of all exposures relating to the use of FDI must be performed on at least a daily basis.

1.2 Leverage - Overview

The term leverage has been widely defined and as such can be misinterpreted. In the context of UCITS using the commitment approach as described below, *simple*

[1] Fully funded swaps that do not provide incremental exposure or leverage (i.e. exposure is created on an un-leveraged basis) as calculated using the commitment approach will only have generated 100% total exposure as defined in paragraph 1.2 below.

leverage should be understood as being the UCITS global exposure divided by the net asset value ("NAV"). As a general rule, a UCITS cannot have global exposure greater than its NAV and so this means that there is a hard limit to a UCITS simple leverage of 100% of NAV. In the context of a non-sophisticated UCITS using the commitment approach to calculate its global exposure, *total exposure* is defined as the NAV of the UCITS and its global exposure. This number may therefore not be greater than 200% of NAV.

While the commitment approach will generally be used by non-sophisticated UCITS to calculate leverage, they also have the option of using a more advanced method. Sophisticated UCITS, however, are required to utilise advanced methods to measure their leverage and risk and so must use Value at Risk ("VaR") or a similar technique to monitor their market risk. Suggested VaR options are discussed in the "Advanced Risk-Measurement Approaches" section below. VaR meets the requirements of the Regulations in estimating exposure by reference to both future market movements and the time allowed to liquidate positions. It is additionally used to measure and manage the "leverage effect" produced by the use of FDI.

A UCITS may not use borrowings to invest in FDI transactions or as cover for individual FDI positions. Borrowings may only be used to finance temporary cash flow mismatches.

1.3 Calculation of Global Exposure – Commitment Approach

In calculating its global exposure, a non-sophisticated UCITS may apply the "Commitment Approach". This approach converts the UCITS FDI positions into the equivalent positions of the underlying assets and seeks to ensure that the UCITS risk is monitored in terms of any future "commitments" to which it is (or may be) obligated. The commitment approach should also be used by all UCITS in determining position cover and position (issuer-concentration) risk limits (as referred to in paragraphs 1.7 and 1.8 below).

A non-sophisticated UCITS using the commitment approach must ensure that its global exposure from the use of FDI does not exceed its total NAV. This represents a hard leverage limit of 100% of NAV as discussed above. As a non-sophisticated

UCITS is not required to utilise advanced risk-measurement approaches, its ability to take on market risk (as calculated purely by the commitment approach) may be restricted in cases where the Financial Regulator disagrees with a UCITS self-classification, i.e. the Financial Regulator may impose simple leverage restrictions below the 100% maximum limit in these cases.

The commitment calculation for certain FDI instruments may be adjusted by a *probability factor* that aims to reflect the probability of the FDI commitment occurring. For options and warrants, the delta approach may be used. Where it is not possible to calculate a probability factor on a scientific and objective basis, the factor is assumed to be 1.

The calculation of global exposure will always be presented as an absolute positive number and may be calculated after the application of the netting and hedging rules described below. The methodology therefore does not allow for the calculation of negative commitments.

Appendix II sets out the commitment rules for a non-exhaustive list of commonly traded FDI.

1.4 Advanced Risk-Measurement Approaches

A sophisticated UCITS must use an advanced risk measurement methodology whereas a non-sophisticated UCITS may opt to use such a methodology instead of the commitment approach. The use of an advanced risk measurement methodology to assess a UCITS market risk is required in order to ensure that the leverage effect of utilising FDI is not significant enough to cause disproportionate losses to the UCITS overall value. The Financial Regulator recommends the use of VaR in order to measure this market risk. Other methodologies may be acceptable and will be considered on a case-by-case basis. The following are the two preferred methods of using VaR to measure and manage market risk volatility:

- *Relative VaR* – this is defined as the VaR of the UCITS divided by the VaR of a benchmark or reference portfolio (i.e. a similar portfolio with no derivatives). This can be an actual benchmark portfolio (such as an index) or a fictitious benchmark portfolio. The VaR on the UCITS portfolio shall not exceed twice the VaR on a comparable benchmark portfolio.

- *Absolute VaR* – this is defined as the VaR of the UCITS capped as a percentage of NAV. The absolute VaR of a UCITS cannot be greater than 5% of the NAV. On a case-by-case basis, the Financial Regulator will accept proposals to raise this limit where it can be proved that such an increase will not increase the overall risk profile of the UCITS to an unacceptable degree. Such a proposal must be accompanied by quantitative data and director sign-off. Additionally the Financial Regulator recognises that FDI can always be used to reduce overall VaR, even when the VaR of the securities alone exceeds the absolute VaR limit above.

A UCITS that proposes to use a VaR model must detail the following quantitative and qualitative standards in its RMP in order to enable the Financial Regulator to appropriately examine the proposal.

A UCITS that uses VaR must build in the following quantitative standards:

- The confidence level should be 99%;
- The holding period should not be greater than 1 month;
- The historical observation period should not be less than 1 year, however a shorter observation period may be used if justified, for example as a result of significant recent changes in price volatility;
- Stress tests should measure any potential major depreciation of the UCITS value as a result of unexpected changes in the relative value parameters. The stress tests must be appropriate for analysing potential situations in which the use of FDI would bring about a loss. Stress tests must be carried out at least once a quarter and results documented; and
- The quality of the VaR model forecasts must be demonstrated by means of a comparison between the potential market risk amount calculated by the model and the actual change in the value of the portfolio (back-testing). If the latter exceeds the former on more occasions than should be envisaged using the stated confidence interval, the UCITS must take appropriate action immediately. The frequency of such back-testing should be appropriate to the risk profile of the UCITS.

In assessing the use of VaR by a UCITS, the Financial Regulator will also take into account the following qualitative standards:

- The internal controls and internal audit controls over the processes and procedures adopted by the UCITS and risk manager, including the risk area staff profile and expertise;

- A description of the type of VaR model proposed and why the model is appropriate to the business being conducted. If the model is an internal one, details of any third party verification (e.g. auditor, other regulatory body); and

- An overview of the software and the work done to ensure its accuracy, including verification of consistency of results (e.g. breakdown of atypical results).

These standards must be comprehensively documented in the RMP and, based on the data supplied, the Financial Regulator may request additional information to be provided. If a UCITS uses additional methods of risk measurement such as Tracking at Risk and Tracking Error Volatility in addition to VaR, such methods, while discretionary, must also be documented in the UCITS RMP.

1.5 Position Netting and Hedging Requirements

In calculating a UCITS global exposure, issuer-concentration and cover requirements, the Financial Regulator will permit purchased and sold derivative positions to be netted provided that:

- Both relate to the same underlying asset, rate or reference item, or, if not the same, in the case of FDI on fixed income securities:
    - they bear a high degree of negative correlation in terms of price movement; and
    - both are cash settled with the same currency exposure; and
- Both are sufficiently liquid and are marked to market daily; and
- In the event that one of the positions is exercised, arrangements are such that the UCITS will have the cover necessary to fulfil its actual or potential obligations under the outstanding position.

In calculating a UCITS global exposure, the Financial Regulator will additionally permit FDI hedging transactions to reduce such exposure. Therefore FDI and security positions may be netted provided that:

- The FDI relates to the same underlying as the reference asset, rate or index and exhibits a high negative correlation; and/or
- It can be proved that the overall risk profile of the UCITS is reduced by the hedging transaction.

The exposure calculations must always be performed on a daily basis, even if FDI are used purely for hedging purposes.

1.6 Embedded Derivatives

If a transferable security or money market instrument embeds an FDI, then the global exposure, issuer-concentration and leverage calculation rules apply to the embedded

FDI element of the transferable security and money market instruments. A UCITS therefore needs to be able to separate embedded FDI from the host instrument in order to meet regulatory requirements.

A transferable security and money market instrument embeds a FDI where it contains a component which fulfils the following criteria:

- By virtue of that component some or all of the cash flows that otherwise would be required by the transferable security or money market instrument which functions as host contract can be modified according to a specified interest rate, financial instrument price, FX rate, index of prices or rates, credit rating or credit index, or other variable, and therefore vary in a way similar to a stand-alone FDI;
- Its economic characteristics and risks are not closely related to the economic characteristics and risks of the host contract; and
- It has a significant impact on the risk profile and pricing of the transferable securityor money market instrument in question.

Examples of structured financial instruments that may be assumed to embed a FDI are:

- Credit linked notes;
- Convertible or exchangeable bonds;
- Structured financial instruments whose performance is linked to the performance of, for example, a basket of shares or a bond index, or structured financial instruments with a nominal fully guaranteed whose performance is linked to the performance of a basked of shares with or without active management;
- Collateralised debt obligations and asset backed securities that create leverage, i.e. the CDO is not a limited recourse vehicle and the investors' loss can be higher than their initial investment or are not sufficiently diversified.

UCITS using Structured Financial Instruments embedding FDI must respect the principles of the Regulations. These include:

- Embedded FDI may never be used to circumvent the principles and rules set out in the Regulations;
- In compliance with Regulation 48B 2(c) "when a transferable security or money market instrument embeds a derivative, the latter must be taken into account when complying with the requirements of Regulation 48B". As a consequence, the UCITS must:

- employ "a risk-management process which enables it to monitor and measure at any time the risk of the positions and their contribution to the overall risk profile of the portfolio" (ref: Regulation 48B 1);
- have a global exposure relating to derivative instruments that does not exceed the total net value of its portfolio (ref: Regulation 48B 2(a));
- comply with all the investment limits set out in the Regulations "A UCITS may invest ... in financial derivative instruments provided that the exposure to the underlying assets does not exceed in aggregate the investment limits set laid down in Regulation 49 " (Regulation 48B 2 (b)). More specifically:
  - UCITS using Structured Financial Instruments embedding FDI should refer to the Commission Recommendation on the use of FDI by UCITS in order to comply with the risk spreading rules required by the Regulations, as this Recommendation sets out how the underlying assets of FDI should be taken into account when assessing compliance with the risk limits set by the above-mentioned article; and
  - embedded derivatives will generally not be taken into account when calculating counterparty limits, except if these products enable the issuer of the hybrid instrument to pass the counterparty risk of underlying derivatives to the UCITS.

It is the responsibility of the UCITS to check that investment in hybrid instruments embedding derivatives complies with these requirements. The nature, frequency and scope of checks performed will depend on the characteristics of the embedded derivatives and on their impact on the UCITS, taking into account its stated investment objective and risk profile.

Where the UCITS considers that this impact is not significant, controls can be tailored accordingly. In such cases, the UCITS may for instance rely on redefined investment limits to ensure compliance with the above mentioned principles.

1.7 Position (Issuer-Concentration) Risk

Paragraph 5 of Notice UCITS 10 states that "*position exposure to the underlying assets of FDI, including embedded FDI in transferable securities or money market instruments, when combined where relevant with positions resulting from direct investments, may not exceed the investment limits set out in the Notices*". Also, paragraph 14 of Notice UCITS 9 imposes an overall issuer-concentration (position) limit to a single counterparty whereby a combination of two or more of the following

issued by, or made or undertaken with, the same body may not exceed 20% of the NAV:

- Investments in transferable securities or money market instruments;
- Deposits;
- Counterparty risk exposures arising from OTC derivative transactions; and/or
- Position exposure to the underlying assets of FDI;

Position exposure to the underlying assets of FDI should be calculated using the commitment approach. The economic effect of certain FDI transactions may result in the UCITS being short the underlying ("synthetic short position"). This may be done for hedging or speculative purposes. In calculating overall position exposure, it is not permissible to net a synthetic short exposure against a long security exposure unless the positions meet the hedging requirements above. If the hedging requirements are not met, the synthetic exposure should be treated as a long exposure (absolute positive number) for such calculations.

- Paragraph 5 of Notice UCITS 10 does not apply in the case of index-based FDI provided that that the underlying index is one which meets with the criteria set out in Regulation 49A of the 2003 Regulations. Guidance Note 2/07, Financial Indices, provides further detail in this regard.

1.8 Position Cover Requirements

These requirements are applicable to all circumstances where a UCITS has commitments under the terms of the FDI contract, including synthetic short positions (i.e. transactions in which a UCITS is exposed to the risk of having to buy securities at a higher price than the price at which the securities are to be delivered). A UCITS is therefore exposed to the risk that it cannot meet all or part of its commitments under the terms of the FDI contract. A UCITS must therefore hold cover as follows:

- in the case of FDI which automatically, or at the discretion of the UCITS, are cash settled, a UCITS must hold, at all times, liquid assets which are sufficient to cover the exposure.
- in the case of FDI which require physical delivery of the underlying asset, the asset must be held at all times by a UCITS. However, a UCITS may alternatively cover the exposure with sufficient liquid assets where:
  - the underlying consists of highly liquid fixed income securities; and/or

- o the UCITS considers that the exposure can be adequately covered without the need to hold the underlying assets, the specific FDI are addressed in the RMP and details are provided in the prospectus.

Liquid assets are defined in the UCITS Notices as money market instruments and transferable securities that can be repurchased, redeemed or sold at limited cost, in terms of low fees and narrow bid/offer spread, and with very short settlement delay. Liquid assets must be compliant with the Regulations and the investment policy of the UCITS. The level of cover required must be calculated using the commitment approach, except in the case of net cash settlement.

2. Counterparty Risk Exposure

2.1 Counterparty Risk Exposure - Overview

The purpose of imposing counterparty limits on a UCITS is to ensure that the UCITS is not exposed to a single counterparty disproportionately. In the event of a counterparty failure, the risk of material loss will be reduced due to risk diversification. OTC derivative transactions give rise to counterparty risk exposure as they are bi-lateral contracts for non-exchange traded FDI. Moreover, the counterparty exposure related to OTC derivatives must be added to other non-FDI exposures that the UCITS may have to the counterparty in order to ensure that overall counterparty exposure limits are not breached, i.e. the total exposure to a single counterparty arising from all activities should be captured in the risk management systems. FDI transactions that are traded on exchanges where daily mark-to-market valuations and margining occur are deemed to be free of counterparty risk (i.e. exchange-traded derivatives).

2.2 Calculation Methodology

Counterparty risk exposure should be calculated as set out in steps (a) and (b) of Annex II to the Financial Regulator's Notice *"Implementation of EC Own Funds and Solvency Ratio Directives for Credit Institutions Incorporated in Ireland"* – ref BSD Notice S 1/00 of 30 June 2000, available on our website.

This methodology takes the current exposure as the positive mark-to-market value of the FDI (step (a)) plus an add-on calculation for future credit exposure (step (b)).

This total amount is an approximation of credit exposure until maturity of the contract and is therefore an estimate of the maximum amount the UCITS may lose in the event of a counterparty default between the date of calculation and the maturity of the contract.

Step (b) of the calculation may be calculated as a percentage of the positive mark-to-market value of the FDI instead of the notional value. Only a positive mark-to-market value will give rise to an exposure, because step (b) is not applicable in situations where a negative or zero mark-to-market balance with the counterparty exists[3]. This percentage should be calculated by reference to the table of multipliers (Table 1) in the BSD Notice referred to above. In determining the appropriate category to be applied, contracts involving bonds and bond yields may use the "interest-rate" table of multipliers.

Counterparty risk exposure is not required to be calculated for a financial instrument embedding a FDI unless the FDI is contractually transferable independently of that instrument thereby enabling the issuer to pass the credit risk of the FDI to the UCITS.

2.3 Counterparty Limits

Paragraph 13 of Notice UCITS 9 limits exposure to OTC derivative counterparties to a maximum of 5% of NAV – to be calculated using the methodology described above. This limit is raised to 10% in the case of credit institutions as defined by paragraph 7 of Notice UCITS 9.

2.4 Counterparty Requirements

Paragraph 3 of Notice UCITS 10 sets out the eligibility criteria for a counterparty. These include minimum requirements on credit rating and valuation. Paragraph 1 (f) of Guidance Note 1/00 should also be referred to in implementing the correct valuation procedures. The criteria that a UCITS will adopt in this regard must be documented in its RMP.

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[3] In the case of fully funded swaps, the add-on for future credit exposure shall be calculated by reference to the mark-to-market or performance element of the swap.

2.5 Counterparty Netting Requirements

UCITS are permitted to net the mark-to-market value of OTC derivative positions with the same counterparty provided that the UCITS has a contractual netting agreement with its counterparty which creates a single legal obligation such that, in the event of the counterparty's failure to perform owing to default, bankruptcy, liquidation or any other similar circumstance, the UCITS would have a claim to receive or an obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions.

2.6 Collateral Requirements

Paragraph 4, Notice UCITS 10 states that the risk exposure to an OTC derivative counterparty may be reduced where the counterparty will provide the UCITS with collateral. Requirements in relation to permitted collateral are set out in Notice UCITS 10.

3. Reporting Requirements

3.1 Risk Management Process

A UCITS must employ a RMP that enables it to monitor, measure and manage the risks attached to FDI positions. Details of this process must be provided to the "Financial Institutions and Funds Authorisation" department of the Financial Regulator for review. Appendix I ("Risk Management Process – Guide to Filing Requirements") sets out guidance in this area and a suggested format for the UCITS to use. The Appendix also includes a checklist to assist in the filing process.

3.2 UCITS Annual FDI Report

Paragraph 9 of Notice UCITS 10 states that "A UCITS must submit a report to the Financial Regulator on its FDI positions on an annual basis". The report must be signed by the UCITS and submitted with the annual report of the UCITS to the "Investment Service Providers Supervision" department of the Financial Regulator.

The purpose of such a report is to enable the Financial Regulator to review the UCITS use of FDI during the year and any risk breaches as well as allowing the UCITS to

update the RMP as required. The Financial Regulator may require additional information or clarification based on the data submitted.

The UCITS Annual FDI Report should therefore include details of the following:

- Summary review on the use of FDI by the UCITS during the year by reference to paragraph 8 of Notice UCITS 10;
- Instances of any breaches of global exposure during the year, with an explanation of remedial action taken and duration of the breaches;
- Instances of any breaches of counterparty risk exposure during the year, with an explanation of remedial action taken and duration of the breaches;
- Where relevant, a summary of non-material updates to the RMP, for example, changes to personnel, systems, procedures and instruments used. In this instance a revised RMP should be attached.

In the case of UCITS using VaR, additional information is required as follows:

- Year-end VaR number expressed as a percentage of NAV (where applicable);
- Instances of any breaches in VaR limits during the year, with an explanation of remedial action and duration of breach;
- Confirmation as to whether back-testing has been successful in accordance with the requirements and, if not, what actions the UCITS has taken to address the situation;
- Confirmation that the UCITS does have a stress testing regime, an overview of the broad assumptions behind such testing and a commentary on the results of the stress testing and its applicability to the day to day use of the model.

4. Prospectus Disclosure Requirements

A UCITS must provide specific disclosure in relation to the use of FDI, to clarify at the outset the purpose behind the use of these instruments and to set out the extent to which the UCITS may or may not be leveraged as a result. Given the definition of leverage above, a UCITS will be leveraged if it expects to have a global exposure number greater than zero. Further details on general prospectus disclosure requirements applicable to complex products are detailed in Guidance Note 3/07, Structured Products and Complex Trading Strategies – Prospectus Disclosure Requirements.

The following requirements are taken from Notice UCITS 6 – Prospectus:

Additional information requirements for UCITS that use financial derivative instruments.

A UCITS which may engage in transactions in FDI must include a prominent statement to this effect, which will indicate of FDI may be used for investment purposes and/or solely for the purposes of hedging. This statement must also indicate the expected effect of FDI transactions on the risk profile of the UCITS. A description of the permitted types of FDI must be provided.

Where a UCITS will invest principally in FDI, it must insert a warning of this intention at the beginning of the prospectus and any other promotional literature.

The following general requirements are also included in Notice UCITS 6:

(xvi) Where the net asset value of a UCITS is likely to have a high volatility due to its investment policies or portfolio management techniques, this possibility must be highlighted in the prospectus and in any promotional literature which it issues.

(xvii) A statement that the UCITS will, on request, provide supplementary information to unitholders relating to the risk management methods employed, including the quantitative limits that are applied and any recent developments in the risk and yield characteristics of the main categories of investments.

In addition, with regard to:

- ***Efficient Portfolio Management*** *("EPM"):* While it is acceptable to refer to EPM in the prospectus, the reference must be accompanied by further detail in order to clarify the instruments and/or strategies that the UCITS may utilise. In the section under EPM therefore, the prospectus should list the FDI that the UCITS will or may use to achieve EPM, although such a list need not be exhaustive. EPM refers to techniques and instruments, including FDI, used for one or more of the following specific aims:
    - The reduction of risk;
    - The reduction of cost;
    - The generation of additional capital or income for the UCITS with a level of risk which is consistent with the risk profile of the UCITS.

Financial Institutions and Funds Authorisation
Financial Regulator
December 2007

APPENDIX I

UCITS: Risk Management Process – Guide to Filing Requirements

Overview

The Risk Management Process document should:

- be a stand-alone document and so should include all relevant information and not cross-reference to other non-RMP documents; and
- only include appendices that are clear and understandable.

The Financial Regulator requires that a UCITS system for measuring the various risks associated with FDI should be both comprehensive and accurate. UCITS are exposed to the operational risk that deficiencies in information systems or internal controls will result in unexpected loss. This risk is generally associated with inadequate procedures and controls as well as human error and system failures. Therefore the Financial Regulator considers it important that the RMP submitted should be detailed and comprehensive. The primary components of a sound risk management system are:

- A comprehensive risk measurement approach;
- A detailed structure of limits, guidelines and other parameters used to govern risk taking; and
- A strong management information system for controlling, monitoring and reporting risks.

Authorisation Requirements

A UCITS must submit details of the proposed risk management system in the form of a formal statement, signed and duly dated. It must be submitted in good time to allow it to be assessed prior to authorisation, and should take account of the following:

- Where the risk management process will be carried out by an entity other than the UCITS, it is the responsibility of the UCITS to provide the necessary details from its risk-manager on the procedures that will be applied. This report, which must be set out on the headed paper of the third party, must include contact details of people responsible for the execution of the process;

- It is important that the submission from the UCITS details how it will monitor and control the procedures set out by the third party risk-manager on an ongoing basis and must include escalation procedures in the event of a regulatory breach. This will normally be in the form of a covering letter accompanying the RMP submitted to the Financial Regulator. The covering letter from the UCITS should identify, inter alia, the risk-manager that has

been appointed by the UCITS and set out how it will supervise the work of its delegate, including how it will monitor and control the applicable compliance and quantitative limits, as well as noting procedures that apply in the event of regulatory breaches (immediate escalation is required).

A UCITS that proposes to use a RMP, the details of which have already been supplied to the Financial Regulator in the context of an earlier application, is not required to re-submit those details where the UCITS confirms in writing that the same process will be applied without amendment. Material amendments to the RMP should be submitted by the UCITS to the Financial Regulator in advance. Other amendments should be noted in the UCITS Annual FDI Report.

As an aid in preparing the document and ensuring that the Financial Regulator's requirements are met, the following is a suggested model for the submission. While the format is not obligatory, alternative formats must ensure that all of the required information is included. In order to aid review, RMP submissions should also be accompanied by the relevant prospectus extract detailing the FDI the UCITS may use.

1. General Information

- Details of the entity and unit(s) responsible for FDI valuations, risk measurement and management. This will include information on when formed, who regulated by, AUM and a description of any areas of specialist expertise.
- Policy on the level of expertise required by persons engaged in any part of the planned FDI activity. Specify what expertise is currently in place in terms of personnel and/or departments involved.
- Details of specific FDI, including embedded derivatives in transferable securities and money market instruments, with a description of their commercial purpose. Notwithstanding that a wide range of FDI may be referred to in the prospectus, the Financial Regulator will permit that the RMP may detail only those FDI that will be employed initially by the UCITS. In this case, the prospectus must include a statement stating that any FDI not included in the RMP will not be utilised until such time as a revised submission has been provided to the Financial Regulator.
- An explanation of the risks involved to the UCITS by utilising the specific FDI referred to above.
- A description of the valuation rules for all specified FDI, including the policy with regard to the valuation of illiquid FDI. In respect of OTC FDI, this must be in compliance with Notice UCITS 10, paragraph 3 (iv) and (v), and paragraph 1 (f) of Guidance Note 1/00.

- Overview of the information technology systems being used by risk-manager to monitor, measure and manage the risk process.
- Policy in relation to the monitoring and management of legal risk, particularly in the context of OTC derivatives (particularly credit derivatives, if applicable). Legal risk is the risk of loss due to the unexpected application of a law or regulation, or because contracts are not legally enforceable or documented correctly.

2. Global Exposure and Leverage

- The method of measurement the UCITS will use to calculate its Global Exposure and Leverage with appropriate rationale (i.e. sophisticated or non-sophisticated classification).
- For non-sophisticated UCITS, a detailed description of the methodology to be used for the calculation of Global Exposure and Leverage. This must include a numeric example, with appropriate calculations, for each FDI the UCITS will be utilising, to illustrate how the UCITS will apply the Commitment Approach.
- Policy to be adopted regarding cover requirements.
- Policy adopted regarding issuer concentration risk (position risk).
- Procedures the UCITS will follow to monitor and control the calculations of Global Exposure and Leverage to ensure compliance with requirements, including details of the management controls and systems that the UCITS will employ such as:
    - Monitoring of compliance and quantitative limits
    - Prevention of limit breaches
    - Trade monitoring
    - Position netting
- For UCITS using advanced risk management techniques, the Value at Risk ("VaR") or other advanced method that will be applied (see proposed methods in Section 1 of the Guidance Note). This description should describe the quantitative and qualitative parameters adopted as detailed in section 1.4 of this paper. If a benchmark is being used for VaR, details of such benchmark (relative VaR).
- A description of any other risk measures used in addition to the Commitment Approach or VaR (e.g. tracking-error, stop-losses).

3. Counterparty Risk Exposure

- Policy on how the UCITS will calculate its counterparty exposure. This policy statement should refer to the following:
    - Counterparty approval (note that credit derivatives should be subject to the same approval and monitoring process as credit risk derived from more traditional derivative products)
    - Un-rated counterparties and implied ratings
    - Use of collateral

  - Use of netting
  - Quantitative standards

- The calculation methodology to be used with a description of the steps involved.
- Details of the management controls and systems that the UCITS will employ in the measurement and management of counterparty risk, including:
  - Monitoring of compliance and quantitative limits (e.g. concentration limits); and
  - Prevention of limit breaches.

4. Reporting Requirements

- Details of the procedures for preparing the Annual FDI Report, including an outline of the format of the report.
- Details of internal reporting procedures. This should include frequency of board meetings and, where relevant, the formal lines of communication between the risk-manager and the UCITS. The procedures should also include the steps to be taken by the UCITS and/or the risk manager in the event of a regulatory breach, including escalation procedures.

The following is a checklist to assist in the completion of the RMP submission:

Procedural **Yes/No**

1 RMP on risk manager's headed paper, dated and signed
2 Where relevant, covering letter from UCITS setting out, inter alia:
  a. The risk-manager
  b. How FDI compliance and quantitative limits will be monitored
  c. Escalation procedures in the event of limit breaches
3 Ensure FDI in RMP agrees with prospectus (submit extracts)

General Information

1 Details of entities and units responsible for risk and valuations
2 Policy on expertise required to trade and manage FDI and related risks
3 Details of expertise currently in place (i.e. personnel responsible)
4 Details of all FDI to be used with summary of commercial purpose
5 Details of risks involved to the UCITS from using FDI
6 Description of FDI valuation rules and pricing methodology
7 Description of systems and technology used
8 Description of policy and procedures re legal risk (in particular credit derivatives)

Global Exposure and Leverage

1 Policy on Leverage and Global Exposure
  a. Policy on Asset Cover
  b. Quantitative Limits
  c. Hedging
  d. Position Netting
2 Description of the methodology to calculate global exposure
3 Example provided on calculation of global exposure – using FDI traded
4 Description of methodology on using VaR
  a. Description of model used
  b. Quantitative Limits
  c. Stress Testing Procedures
  d. Back Testing Procedures
5 Has the model been examined by a competent regulatory authority
6 Procedures and controls documented, including
  a. Monitoring & reporting compliance and quantitative limits
  b. Prevention of limit breaches
  c. Trade monitoring
7 Any other risk measures used/described – e.g. tracking error
8 Issuer Concentration risk

Counterparty Exposure

1 Policy on counterparty risk exposure, including the following:
  a. Counterparty approval (including rating requirements)
  b. Use of collateral
  c. Netting (legally enforceable netting agreements)
2 Description of quantitative standards adopted
3 Description of methodology to calculate counterparty exposure

Reporting

1 Details of procedures and content of Annual FDI Report

Warning: The contents of this checklist should not be relied upon to reflect the complete RMP requirements of the Financial Regulator. Additional information may be requested.

APPENDIX II

Commitment Approach

As stated in Section 1 of the Guidance Note, the *global exposure* of a non-sophisticated UCITS may be calculated using the commitment approach. The commitment approach is calculated by converting the FDI position into the equivalent position in the underlying asset, based on the market value of the underlying asset. Section 1 of the Guidance Note also sets out the circumstances where purchased and sold FDI, and security positions and FDI (hedging transactions), may be netted in order to reduce global exposure. The RMP, when submitted, must include the commitment calculations specific to each type of FDI being utilised by the UCITS. Exposure calculations must be performed in all instances, including where FDI are used for hedging purposes. In such cases it is expected that the exposure is calculated and then netted against the instrument being hedged.

Additionally, position (issuer-concentration) risk and position cover requirements must be calculated using the commitment approach.

The following is a non-exhaustive list of the generic rules that must be followed by UCITS in calculating their exposure using this methodology.

Instrument	***Calculation Methodology***
Exchange Traded Future:	
Long (Buy)	Positive market value ("MV") of underlying asset
Short (Sell)	Positive MV of underlying asset
Exchange Traded Index Future:	
Long (Buy)	Positive MV of underlying index (contract size * index value)
Short (Sell)	Positive MV of underlying index
Put Option:	
Long (Buy)	Positive delta-adjusted MV of underlying asset
Short (Sell)	Positive delta-adjusted MV of underlying asset
Call Option:	
Long (Buy)	Positive delta-adjusted MV of underlying asset
Short (Sell)	Positive delta-adjusted MV of underlying asset
Currency Forwards:	
Non-hedge	Positive MV of the currency leg of the transaction
Interest Rate Swap (IRS)	As currency forwards
Cross Currency IRS	As currency forwards
Forward Rate Agreement	As currency forwards
Credit Default Swap	
Buy	Positive MV of underlying asset
Sell	Positive MV of underlying asset
Contract for Differences	
Long (Buy)	Positive MV of underlying asset
Short (Sell)	As above
Swaption	As options
Warrant	As options
Total Return Swap (Index Swap)	Positive MV of underlying assets