Annex to CESR's technical advice on the level 2 measures related to the format and content of Key Information Document disclosures for UCITS (Ref. CESR/09-949): methodology for the calculation of the synthetic risk and reward indicator

Background

In its technical advice to the European Commission on the Key Information Document for UCITS (CESR/09-949), published on 28 October 2009 (hereafter the Advice), CESR proposed the use of a synthetic indicator (hereafter the SRRI) for funds' risk and reward disclosure, accompanied by a short narrative description of the limitations of the indicator and, where relevant, the risks that are not fully captured by the indicator.

In order to reach this conclusion, CESR consulted twice with external stakeholders, during the spring (March) and over the summer (August and early September) of 2009, and took into account, inter alia, the findings from the Commission's testing exercise. In particular, the testing revealed that investors have a strong preference for the inclusion of a synthetic indicator in the Key Information Document (KID), and that they seem to be more confident in their ability to compare funds and assess their level of risk when they are provided with an indicator based on a numerical scale.

However, CESR also acknowledged that a move towards the inclusion of a synthetic risk and reward indicator requires agreement on the methodological elements underlying the calculation of such an indicator. This will ensure that all UCITS funds are classified into the risk and reward scale according to the same criteria throughout the European Union, with no potential prejudice to the level playing field.

CESR has therefore elaborated the methodology for the computation of the SRRI, which is presented in this Annex to the Advice. In the formulation of its proposal, CESR benefited from the work of both regulators and industry representatives.

The methodology has been tailored to cover the particular features of the different types of fund and, in particular, to satisfy the following criteria and objectives:

- provide investors with a meaningful indication of the overall risk and reward profile of the UCITS;

- ensure an appropriate spread of UCITS across different risk classes;

- be applicable to all types of UCITS;

- leave no room for manipulation;

- enable easy and cost-effective implementation by UCITS providers;

- be easily understood by auditors, advisers and distributors;

- enable easy and effective supervision by regulators;

- achieve an adequate degree of stability in the risk classification process with respect to normal trends and fluctuations of financial markets.

Methodology for the calculation of the synthetic risk and reward indicator

<table>
<tr><td colspan="2"><u>General methodology</u>   **Box 1**</td></tr>
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1. The synthetic risk and reward indicator shall be based on the volatility of the fund.

2. Volatility shall be estimated using the weekly past returns of the fund or, if not otherwise possible, using the monthly returns of the fund.

3. The returns relevant for the computation of volatility shall be gathered from a sample period covering the last 5 years of the life of the fund and, in case of distribution of income, shall be measured taking into account the relevant earnings or dividend payoffs.

4. The volatility of the fund shall be computed, and then rescaled to a yearly basis, using the following standard method:

$$\text{volatility} = \sigma_f = \sqrt{\frac{m}{T-1}\sum_{t=1}^{T}(r_{f,t} - \bar{r}_f)^2}$$

where the returns of the fund ($r_{f,t}$) are measured over T non overlapping periods of the duration of 1/m years. This means m=52 and T= 260 for weekly returns, and m=12 and T=60 for monthly returns; and where $\bar{r}_f$ is the arithmetic mean of the returns of the fund over the T periods:

$$\bar{r}_f = \frac{1}{T}\sum_{t=1}^{T} r_{f,t}$$

5. The synthetic risk and reward indicator will correspond to an integer number designed to rank the fund over a scale from 1 to 7, according to its increasing level of volatility.

6. The illustration of the SRRI in the KID will take the following form:

	Graphic or visual explanations	⇦ **Typically lower rewards** **Typically higher rewards** ⇨ ⇦ **Lower risk** **Higher risk** ⇨
Example of a fund that would fall into category 2:	Risk and reward scale chart	1 **2** 3 4 5 6 7

7. Management companies shall compute the synthetic risk and reward indicator of the UCITS in strict coordination with the arrangements and procedures adopted for risk management purposes, and ensure monitoring of the correct and consistent implementation of this process on an ongoing basis.

8. The computation of the synthetic risk and reward indicator of the UCITS, as well as any of its subsequent revisions, shall be adequately documented. Management companies shall keep records of these computations for a period of not less than five years; this period shall be extended to five years after maturity for the case of structured funds.

Explanatory text

As stated in the Advice, the SRRI should be based on the volatility of the returns (past performances) of the fund; these shall be the weekly past returns of the fund or, if this is not possible because of the limited NAV calculation frequency, the monthly returns of the fund.

The SRRI should therefore translate the volatility of the returns into a general indication concerning the overall level of risk of the fund.

Volatility is a well-known and well-established concept in finance, a measure conceptually easy to grasp and, at the same time, able to capture the effects of very different risk factors. Insofar as risk exposures cause fluctuations in the net asset value (NAV) of a fund, the volatility of its returns will reflect the loadings on all risk and reward drivers from which the fund generate returns. As set out in the Advice, any material changes to the risk and reward profile of the UCITS should result in a prompt revision of the KID, provided this is still being used to comply with the disclosure obligations linked to the public offering of the fund. The revision of the KID shall include, where relevant and appropriate, an update of the SRRI according to the rules established in section 2, paragraph 2.2, of this Annex.

Therefore, management companies should operate the risk classification of UCITS as an integrated part of, or at least in strict coordination with, the arrangements and procedures adopted for risk management purposes, to ensure monitoring of the correct and consistent implementation of this process on an ongoing basis.

Furthermore, the risk classification of UCITS, as well as any of its subsequent revisions, should be adequately documented and subject to a record keeping requirement of five years. As clarified in the following of this Annex, the aforementioned record keeping requirement period shall extend to five years after maturity (expiration of the proposed holding period) for the case of structured funds.

As set out in paragraph 3 of Box 1, the returns relevant for the computation of volatility should be measured taking into account the relevant earnings or dividend payoffs. As clarified in the example below, since the methodology requires calculation of the volatility of weekly (or monthly) returns, no correction (such as assuming reinvestment) is needed with respect to the value of the NAV of the fund.

Week	1	2	3	4	5
NAV	100	96	89	86	90
Distribution of income	No	No	5	No	No
Weekly returns		-4.00%	-2.08%	-3.37%	4.65%
Details of the calculation		(96-100)/100	((89+5)-96)/96	(86-89)/89	(90-86)/86

Relevant returns, in fact, will simply be calculated taking into account also the income which is distributed. Since accrued income should be factored into the NAV, this requirement will not have any impact on the calculation of the returns which do not correspond to the periods (week or month) in which the income is distributed.

Definition of the volatility intervals   **Box 2**

1. The computation of the synthetic risk and reward indicator of UCITS shall be carried out according to the following grid of annualized volatility intervals ('buckets').

2. The grid provides volatility intervals which reflect the increasing level of risk borne by the fund and, therefore, its position in the risk scale.

Risk Class	Volatility Intervals	
	equal or above	less than
1	0%	0.5%
2	0.5%	2%
3	2%	5%
4	5%	10%
5	10%	15%
6	15%	25%
7	25%	

Explanatory text

CESR has considered a range of alternatives and factors in order to formulate its proposal concerning the upper and lower bounds of the volatility buckets that should be used for the classification of funds along the risk scale.

In particular, CESR has considered carefully the issues relating to the stability of the risk classification over the normal cycles which characterise financial markets. In this respect, CESR did not consider it desirable to develop an SRRI involving frequent migrations of category since:

1. The KID will not usually be revised more than once per year;

2. Frequent and significant migrations of funds across risk classes might give investors cause for concern over the reliability of the indicator.

However, CESR also acknowledges that in order to be useful for investors, the risk classification of funds should also provide sufficient discriminatory power to avoid the crowding of many funds in only one or a few buckets.

In order to formulate the proposed grid, CESR took into account, in addition to the results of both its consultations with external stakeholders, the outcome of several empirical studies by regulators, industry representatives and other external contributors and independent experts concerning the potential extent and frequency of the migrations of funds across the risk classes.

The volatility intervals proposed in the table above are the results of a compromise solution designed to strike a balance between the requirement to obtain an adequate degree of stability in the risk classification process and that of pursuing an appropriate spread of UCITS across different risk classes.

Revision of the SRRI – rules to assess migrations	**Box 3**

1. Any material change to the risk and reward profile of the UCITS shall be reflected by a prompt revision of the KID.

2. The synthetic risk and reward indicator shall be revised if the relevant volatility of the UCITS has fallen outside the bucket corresponding to its previous risk category on each weekly or monthly data reference point over the preceding 4 months.

3. Subject to the paragraph above, if the volatility of the UCITS has moved so as to correspond to more than one bucket during the 4-month period, the UCITS shall be attributed the new risk class corresponding to the bucket which its relevant volatility has matched for the majority of the weekly or monthly data reference point during the preceding 4 months.

4. The synthetic risk and reward indicator shall always be revised when changes to the risk and reward section of the KID are the result of a decision by the management company regarding the investment policy or strategy of the fund. In these circumstances, any changes to the SRRI shall be intended as new classifications of the risk of the fund and, consequently, be carried out according to the general rules concerning the risk classification of UCITS presented in this Annex.

Explanatory text

As a general principle, the Advice establishes that any material change to the risk and reward profile of the fund should be reflected by a prompt revision of the KID, including the SRRI if appropriate.

This requirement applies also to those circumstances where the change of the risk and reward profile of the fund is linked to inadvertent changes in the overall market conditions in the segments that are relevant for the investment policies and/or strategies adopted by the UCITS.

Therefore, the SRRI of the fund should be monitored and controlled on an ongoing basis and, if any material change has occurred, the new risk grading of the fund should be reflected in the updated version of the KID.

However, there are several circumstances regarding the risk classification process that should also be taken into account when considering whether a change should be deemed as material.

For instance, the historical volatility used for the risk classification is estimated from a data sample and is, therefore, subject to estimation errors. In this respect, CESR considers that it is appropriate to establish certain rules that prevent migrations between risk categories that may be purely due to sampling errors.

Another situation that could raise concern is the case where the volatility of a particular fund is stable over time but oscillates around the threshold between two risk categories. This situation may cause frequent changes to the risk grading in the KID, while the underlying risk profile of the fund is stable and does not change significantly over time.

In order to address these potential concerns, CESR has established that the SRRI of a fund should be revised if its relevant volatility has fallen outside the bucket corresponding to its previous risk category on each weekly or monthly data reference point over the preceding 4 months. In this case, the UCITS should be attributed the new risk grading corresponding to the bucket, as defined in Box 2 2.1, that its relevant volatility has matched over the preceding 4 months.

In any case, the SRRI should always be revised when changes to the risk and reward section of the KID are the result of a decision by the management company regarding the investment policy or strategy of the fund. In these circumstances, any changes to the SRRI should be intended as new classifications of the risk of the fund and, consequently, be carried out according to the general rules concerning the risk classification of UCITS presented in this Annex.

Specific issues regarding the computation of volatility

- The following sections provide the methodology that should apply to the calculation of the SRRI in circumstances or for funds for which the general approach described in Section 1

may not be appropriate. For example: market funds with an insufficient performance history (Box 4);

- funds with predetermined risk or reward targets (Box 5, 6, 7); and

- structured funds (Box 8).

The identification of the relevant volatility may require some adjustments in the case of funds that employ investment policies pursuing predetermined risk or reward targets. These funds are commonly referred to as 'strategy funds', and a distinction can be made between: (1) absolute return funds, (2) total return funds, and (3) life cycle funds.

The portfolio asset allocation of these funds is actively determined by the strategy adopted by the managers, which may either pursue a specific risk target or limit (as in the case of 'absolute return' funds), or aim to achieve specific reward objectives as set out by the investment policy of the UCITS (as in the case of 'total return' and 'life cycle' funds).

Since the portfolio allocation of these types of fund may change substantially over time, their historical volatility may not appropriately represent their actual risk and reward profile at the time of the computation.

As a consequence, CESR has developed the following adjustments which should be used to identify the relevant volatility of the types of UCITS mentioned above.

Market funds with insufficient performance history   **Box 4**

1. UCITS that are managed according to investment policies or strategies which aim to reflect the risk and reward profile of some pre-determined segments of the capital market shall be considered as market funds.

2. For market funds where a full returns history, as required in Box 1, is unavailable, the methodology for the calculation of the synthetic risk and reward indicator shall be adjusted according to the following steps:

a)   Take the relevant available history of the returns of the fund;

b)   Identify the fund's representative portfolio model, target asset mix or benchmark;

c)   Compute the returns of the representative portfolio model, target asset mix or benchmark of the fund from the beginning of the sample period, as required in Box 1, until the date of availability of the actual returns of the fund;

d)   Concatenate both returns series to one series over the full sample period as required in Box 1;

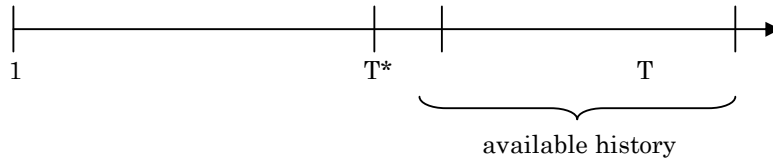e)   Estimate the annualised historical volatility according to the general formula.

Explanatory text

The computation of the relevant volatility may require some adjustments for UCITS that have not been in existence long enough to generate the required time series of relevant returns.

This is typically the case for new funds or funds which have recently revised – to a material extent – their investment policy. In these circumstances, in fact, the relevant returns of the fund are available only from the date of inception (T*), or of validity of the new investment policy, to the most

recent date (T) and, thus, over a period which may fall short of the span of time required under paragraph 1.

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 1                    T*                   T
                         └──────────┬──────────┘
                              available history
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However, the lack of an appropriate history of past returns should in general not represent a problem for 'market funds', that is, for those funds which are managed according to investment policies and/or strategies which predominantly aim at reflecting the risk and reward profile of some predetermined segments of the capital market. In fact, their targets in terms of asset allocation should generally allow the identification of meaningful and appropriate portfolio models, asset mixes or benchmarks for such funds.

As illustrated above, the methodology assumes that a representative portfolio model, target asset mix or benchmark can be identified for these funds, with returns available over the period [1,T*]. However, although this is often the case, the availability of suitable portfolio models or proxy indices or benchmarks cannot be assumed in all circumstances. As a consequence, a solution of 'last resort' should be identified as part of the methodology.

In this respect, CESR believes that, when market funds pursue the risk and reward profile of some market segments which are represented by indices (or benchmarks or target asset mixes) whose return history is not sufficiently long, the SRRI of these funds shall be computed having regard to the volatility of such indices as estimated from the simulation of their relevant returns.

This simulation process shall take into account all the available information and shall be carried out through adequate risk factors models under the assumption of risk neutrality. The Annex to the Implementing Directive/Regulation should recommend that CESR issue Level 3 guidelines on the methodological conditions and requirements to be met by the simulation process mentioned above.

In either case, the computation or the simulation of the relevant returns of benchmarks or target asset mixes shall be adjusted to reflect the effects of the ongoing costs that are charged to the funds only when these can be justifiably expected to affect the volatility estimates to a material degree.

Absolute return funds   **Box 5**

1. UCITS that are managed according to investment policies or strategies which envisage a variable allocation of the portfolio of the fund across asset classes, under the constraint of a predetermined risk limit, shall be considered as absolute return funds.

2. For absolute return funds, the methodology for the computation of the risk and reward indicator shall comprise the following steps:

(a) When a full returns history is available, take the maximum of:

(i) the actual historical annualized volatility; and

(ii)   the volatility that is consistent with the risk limit adopted by the UCITS.

(b) For funds that lack a sufficient returns history, and for funds that have recently revised their investment policy, consider the annualized volatility that is consistent with the risk limit of the

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fund.

3. The volatility referred to in point (a)(ii) shall be deemed consistent with the risk limit of the UCITS if this is itself a risk target for the fund or if, once the risk limit is translated into a VaR measure, this is computed by reverse engineering the VaR under the assumption of risk neutrality.

Explanatory text

CESR believes that for absolute return funds – that is, those funds which are managed in line with a pre-determined risk limit (generally expressed in terms of volatility or VaR measures) – the existence of such an ex-ante risk 'budget' should be deemed a relevant feature for disclosure and should therefore be taken into account for the computation of the SRRI.

In particular, when the risk limit of absolute return funds takes the form of a VaR measure, the relevant volatility required for ranking the risk of the fund should be derived through adequate and consistent reverse engineering of the VaR under the assumption of risk neutrality.

For instance, for a 99% confidence level VaR with holding period equal to a number of T time intervals of 1/m years, the relevant volatility (σ_A) should be computed from reverse engineering the following formula :

$$VaR = -(\text{rf}_{1/m} - \frac{\sigma^2_{1/m}}{2}) \times T + 2.33 \times \sigma_{1/m} \times \sqrt{T} \;;$$
$$\sigma_A = \sigma_{1/m} \times \sqrt{m}$$

where $\text{rf}_{1/m}$ is the risk free rate valid at the time of the computation for each of the T intervals of 1/m years included in the holding period of the fund.

Total return funds   Box 6

1. UCITS that are managed according to investment policies and/or strategies that pursue certain reward objectives by participating, through flexible investment in different financial asset classes (e.g. in both equity and fixed-income markets) shall be considered as total return funds.

2. For total return funds, the methodology for the computation of the risk and reward indicator shall comprise the following steps:

(a) When a full returns history is available, take the maximum of:

(i) the actual historical annualized volatility of the returns;

(ii) the annualized volatility of the returns of the pro-forma asset mix that is consistent with the reference asset allocation of the fund at the time of the computation;

(iii) the volatility which, as elaborated in Box 5, is consistent with the risk limit of the fund, if any and appropriate.

(b) For new funds that lack sufficient returns history and for funds that have revised their investment policy over the required sample period, take the maximum of (a)(ii) and (iii) above.

Explanatory text

Total return funds shall be understood as those UCITS that aim to achieve certain reward objectives by participating in different asset classes (e.g. in both equity and fixed-income markets). The range of these funds is remarkably broad and may also include UCITS that provide some sort of capital protection, such as Constant Proportion Portfolio Insurance (CPPI) or Variable Proportion Portfolio Insurance (VPPI).

The portfolio allocation of total return funds across assets and asset classes may change rapidly over time, following market dynamics or according to managers' views and strategies. As a consequence, the active and dynamic nature of their investment policies requires the identification of the SRRI of total return funds to be calculated taking into account the maximum volatility resulting from the information regarding the past returns history (indent (a)(i)), the recent composition of their portfolios (indent (a)(ii)) and, finally, the risk limits these funds are managed in line with (indent (a)(iii)), if any.

Life cycle funds   **Box 7**

1. UCITS that are managed according to investment policies or strategies which imply a shifting over time of their portfolio allocation from equity to fixed-income assets, according to some pre-determined rules as a target maturity date approaches, shall be considered as life cycle funds.

2. For life cycle funds, the methodology for the computation of the risk and reward indicator shall comprise the following steps:

- When a full returns history is available and the fund has not changed its target asset mix over this period, take the actual historical volatility,

- For new funds that lack sufficient returns history:

i)   take the relevant fund return history;

ii)   identify the representative benchmark, portfolio model or asset mix of the fund and calculate the returns of these proxy indices in accordance with Box 4;

iii)   combine both returns series to estimate the relevant annualized volatility.

Explanatory text

Life cycle funds are managed according to investment policies which require their portfolio asset allocation and composition to become more defensive, switching gradually from equity to fixed-income assets according to some pre-determined rules. Since the portfolio composition changes substantially over time, it may be the case that not all of the return history of these funds is representative of their current overall risk profile.

As a consequence, the SRRI computation methodology for life cycle funds needs to be modified to reflect the changes over time of the portfolio reference asset allocation as envisaged in their investment policies.

Therefore, when a life cycle fund is next due to revise its target portfolio allocation as a consequence of its investment policy or strategy, the management company should update the SRRI according to Box 3 and, consequently, identify the relevant volatility through the proxy indices, as elaborated in Box 4 (benchmarks, representative portfolio models or asset mixes), that are relevant to the fund at that point in time.

In any case, since the investment policy of life cycle funds is inherently structured to lead to such changes of their portfolio allocation, and thus their risk and reward profile, CESR believes that the illustration of their SRRI in a KID should be supplemented by a prominent statement warning investors in clear terms about these characteristics.

The text in Box 7 assumes that a representative portfolio model or target asset mix can be identified for total return funds at the time of the computation (paragraph 2(b)(ii)). However the availability of the information needed to compute the returns of this portfolio model or target asset mix cannot be assumed in all circumstances and, consequently, a solution of 'last resort' should be identified as part of the methodology.

In this respect, CESR believes that, when the return history of such a portfolio model or target asset mix cannot be computed for a sufficiently long time, a simulation of the relevant returns should be allowed.

This simulation process should take into account all the available information and be carried out through adequate risk factor models under the assumption of risk neutrality. The Annex to the Implementing Directive or Regulation should recommend that CESR issue Level 3 guidelines on the methodological conditions and requirements to be met by the simulation process mentioned above.

Structured funds   **Box 8**

1. UCITS which provide investors, at certain predetermined dates, with algorithm-based payoffs that are linked to the performance, or to the realization of price changes or other conditions, of financial assets, indices or reference portfolios shall be considered as structured funds.

2. The synthetic risk and reward indicator for structured funds shall be calculated by considering the annualized volatility corresponding to the 99% VaR at maturity, as elaborated in this Box.

3. The volatility corresponding to the 99% VaR at maturity shall be estimated from historical simulation of the returns of the fund on the basis of the following model:

$$\ln(R_{fund}) \sim N((rf_w - \frac{\sigma_w^2}{2}) \times T; \sigma_w \sqrt{T}) \; ; \; R_{fund} = \frac{NAV^T}{NAV_0}$$

where:

- T identifies the number of weeks included in the holding period of the fund, which is equal to the time (life to maturity) spanned by the algorithm employed by its investment policy ;

- rf_w represents the average weekly risk free rate which is valid at the time of the computation over the holding period of the fund;

- σ_w is the volatility of the weekly (log)returns of the fund.

4. The 99% VaR at maturity of a structured fund which provides a payout linked to the performance of a predetermined reference asset, instrument or pool of assets (in the following the 'XYZ' index) shall be computed through the following steps:

(a) Identify the relevant changes of the XYZ index for each of the T-week holding periods that ends at each of the week included in the past 5 years. If the length of the time series of the XYZ index is not sufficient, this can be integrated, according to the requirements elaborated in Box 4, through backward simulation;

(b) Simulate the (log)returns at maturity of the funds that correspond to the relevant changes of the XYZ index as identified according to (a). If the formula allows for the distribution of dividends, or for the possibility of anticipating results, upon the realization of some circumstances that are matched in the simulation, these pay-offs shall be capitalized at maturity (at the end of the holding period T) through the appropriate risk-free rates which are known at the time of the simulation;

(c) Isolate the 1% percentile of the distribution of the (log)returns of the fund simulated at step 2. This percentile, changed in sign according to international standards, represents the historical simulation VaR of the fund at maturity with a confidence level of 99%;

(d) Once the 99% VaR at maturity has been calculated, the corresponding annualized volatility shall be computed through the following procedure:

i) Identify rf_w as the average weekly risk free rate valid at the time of the computation over the holding period of the fund. This rate shall be estimated if not directly available from the interest swap curve;

ii) Reverse engineer the model introduced above to estimate the weekly returns volatility (σ_w) of the fund which is consistent with the VaR figure calculated as illustrated above (step 3). This can be done by solving the following equation for σ_w :

$$VaR = -(rf_w - \frac{\sigma_w^2}{2}) \times T + 2.33 \times \sigma_w \times \sqrt{T}$$

(e)   Annualize the volatility according to the usual square root rule, $\sigma_A = \sigma_w \times \sqrt{52}$.

5. The use of a specific historical time-period for the calculation of the synthetic risk and reward indicator may generate a bias in the result of this 5-step method, due to the potential drift of the underlying XYZ index over the computation period. The UCITS shall then adapt this 5-step method to ensure that the synthetic risk reward indicator adequately reflects the level of risk of the UCITS through an appropriate correction of this potential drift effect. CESR shall issue Level 3 guidelines on the methods used for correction of the drift effect (so that the guidelines enter into force at the same time as the Directive and its implementing measures).

Explanatory text

As mentioned in the Advice, UCITS shall be classified as structured funds if they provide investors, at certain predetermined dates, with algorithm-based contingent payoffs that are linked to the performance, or to the realization of price changes or of other conditions (path dependency), of financial assets, indices or reference portfolios.

In any case, the payoff targets promised by structured funds are due at certain pre-determined dates, which correspond to the finite maturities of the holding periods proposed for such funds. These dates may also vary depending on the realization of some conditions concerning the underlying assets of the funds.

Structured funds can sometimes be assisted by a guarantee (a 'hard floor'), which ensures investors can recover all, or part of, the capital initially invested in the fund. These capital guarantees can be unconditional (some level of protection is always guaranteed) or conditional (the guarantee can be reduced) or even fully disappear (a knock-out feature), according to some contingency. This

contingency may be an event, for instance a decrease in the value of a reference index (i.e. below a certain level the guarantee no longer applies in full or at all).

To achieve its objectives, a structured fund generally uses complex techniques and instruments (i.e. derivatives with non-linear payoffs) which make its return distribution markedly asymmetrical. In addition, the investment strategy of structured funds generally entails that their exposure to market indices or asset classes (and hence their risk profile) can change quite quickly and drastically over time.

Given both the asymmetry of its return distributions and the changing nature of its risk exposures, neither the historical volatility of a structured fund nor the volatility associated with its current asset mix can be deemed a representative tool for evaluating its risk profile.

In order to address these concerns, the Advice requires the risk profile of structured funds to be evaluated by looking at the potential losses that an investment in the fund may incur at maturity under different market conditions. In particular, the SRRI of structured funds should be estimated by first computing the VaR at maturity through historical simulation and then transforming this measure into the corresponding annualized returns volatility.

This approach is designed to tackle the specific drawbacks that an approach based on a traditional measurement of historical volatility would have. In this respect, VaR is focused, in fact, on the loss side of the return distribution and, therefore, it takes into account any potential asymmetry that such distributions may present.

In addition, by computing the return that the fund would have obtained at maturity, the risk measurement process focuses on the overall strategy of the fund, and not only on the risk profile that the fund might have at a particular point of time. This is more appropriate for structured funds since, as noted above, the risk exposure derived from their portfolio composition can change quite quickly and drastically over time.

The proposed methodology is supported, among other factors, by the evidence that most investors in structured funds hold their investments until maturity. However, since structured funds that fall within the remit of the UCITS Directive must remain open for redemption at any time, CESR believes that the illustration of their SRRI in a KID should be supplemented, where appropriate and relevant, by a prominent warning stating that early repurchase and/or redemption of structured funds' shares/units can be associated with a higher level of risk.

The Annex to the Implementing Directive or Regulation should recommend that CESR issue Level 3 guidelines on the methodological conditions and requirements to be met by the historical simulation process described above and, in particular, with respect to the implementation of paragraphs (4)(a), (b) and (d)(i) in Box 8.