Guidelines on the UCITS risk reporting

30 June 2021
Guidelines on the UCITS risk reporting

CONTENTS

Preliminary remarks, key principles and instructions 4
UCITS risk data (sheet “DataURR”) 7
Section I: Functional data 7
A. Identifiers 7
B. General information 8
Section II: Key investment strategy 10
A. Investment strategy 10
B. Region and market 11
Section III: Global exposure and leverage 12
A. Global exposure using the commitment approach and legal limitation 12
B. Information on absolute VaR method 12
C. Global exposure using a relative VaR method 13
D. VaR limits and back testing 13
E. Realized leverage using the sum of notional method during the reference semester 16
F. Breakdown of the leverage per risk factor using the sum of notional method 16
G. Leverage relative to the use of Efficient Portfolio Management (EPM) techniques 18
H. Sum of notional amounts per derivative category 19
Section IV: Stress testing and other risk indicators 20
A. Univariate stress tests 20
B. Most relevant stress tests 22
C. Other risk indicators 23
Section V: Efficient portfolio management (EPM) techniques 24
A. Repurchase agreement transactions ("repo") 24
B. Reverse repurchase agreement transactions ("reverse repo") 24
C. Securities lending 25
D. Securities borrowing 26
Section VI: Counterparty risk and collateral in relation to EPM techniques / OTC financial derivative instruments and traded derivatives 27
A. Positive net counterparty exposure at semester-end 27
B. Negative net counterparty exposure at semester-end 29
C. Collateral received at semester-end 30
D. Collateral posted at semester-end 31
E. Information on trading of financial derivative instruments at semester-end 32
F. Information on clearing of OTC financial derivative instruments at semester-end 32
Section VII: Liquidity risk

A. UCITS portfolio liquidity profile in normal market conditions at semester-end

B. UCITS portfolio liquidity profile in stressed market conditions at semester-end [OPTIONAL]

C. Information on redemption

D. UCITS shareholders at semester-end

E. Liquidity management tools in accordance with the constitutive documents / prospectus

F. Usage of ex-post liquidity management tools during the reference semester

G. Use of borrowing by the UCITS during the reference semester

H. Miscellaneous on liquidity management

Section VIII: Credit risk information

A. Debt portfolio credit quality

B. Debt portfolio credit spreads

C. Credit linked instruments

Sheet “Contact details”
Guidelines on the UCITS risk reporting

Preliminary remarks, key principles and instructions

PRELIMINARY REMARKS

This document gives further guidance on the UCITS risk reporting and contains definitions, explanations and examples for the items as referred to in the Excel reporting file.

Please note that all the documents that are referenced in the present guidelines are available on the CSSF website under the following URL (section "National prudential reporting / URR - UCITS risk reporting"): https://www.cssf.lu/en/legal-reporting-for-ucits/

For any questions regarding these guidelines please contact Ms Mireille Reisen (telephone: +352 26 25 1 2356, e-mail: mireille.reisen@cssf.lu) or Mr Pierre Trovato (telephone: +352 26 25 1 2717, e-mail: pierre.trovato@cssf.lu).

KEY PRINCIPLES AND INSTRUCTIONS

Reporting scope: The present reporting obligation does apply to all Luxembourg domiciled UCITS authorized by the CSSF as at 30 June 2021. UCITS liquidated during the reference period are out of scope.

While management companies and investment companies know the UCITS they manage and that are covered by the reporting scope, the CSSF asks them nevertheless to critically verify, prior to the submission of the report, that they cover all UCITS authorized as at 30 June 2021 by consulting the following list available on the CSSF website:


Please note that this list will only be available as from 15 July 2021.

The reporting file encompasses two separate sheets:

- the first sheet named "DataURR” mainly refers to risk information at UCITS level (hereafter “UCITS risk data”) whereas

- the second sheet labelled “Contact details” aims at collecting contact details at the level of the management company or self-managed investment company in order

1 In the remainder of these guidelines, the term "UCITS” will be used both for an entity in the case of a non-umbrella UCITS and for each sub-fund in the case of an umbrella UCITS.

2 Management companies and investment companies have to identify in the list their respective UCITS for which they assume responsibility.
to enable the CSSF, amongst others, to send the circular letter for UCITS risk reporting by e-mail (in addition to the posted letter) to all addressees.

All the aforesaid UCITS, without exception, have to provide contact details in the second sheet as well as the data items referred to in Section I (“Functional Data”) of the UCITS risk data.

In addition to Section I, all UCITS meeting one or both of the following criteria (hereafter “the reporting scope”) have to fill in sections II to VIII of the UCITS risk data:

a) UCITS with total net assets (TNA) at the reporting reference date equal or higher than 500 million euros;

b) UCITS using the Value-at-Risk (VaR) method for calculating the global exposure as laid down in article 42(3) of the 2010 Law, as further detailed by the CSSF Regulation 10-4 and CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS” (Ref. 10-788), (hereafter “CESR’s guidelines on Risk Measurement”) with an arithmetic average leverage (calculated as the sum of the notional of the derivatives used) over the reference semester greater than or equal to 250% of the UCITS total net assets.

**Frequency:** The frequency of the UCITS risk reporting is semi-annual, this reporting exercise covering the half-year starting 1 January 2021 and ending 30 June 2021. For completeness purposes, the next report is scheduled for the reference date 31 December 2021 covering the semester from 1 July 2021 to 31 December 2021.

**Reporting reference date:** In principle, the last day of every calendar semester (e.g. end of June and December) shall be considered as the reference date for drawing up the UCITS risk reporting to be communicated by UCITS.

**Reporting deadline:** UCITS shall submit the UCITS risk reporting as at 30 June 2021 to the CSSF by **16 August 2021** at the latest.

**Umbrella UCITS:** The UCITS risk reporting shall be drawn up separately for each sub-fund. No consolidation is required at entity level.

The CSSF understands that some data items, as referred to in the present reporting, might be available at share class level (e.g. VaR, leverage, volatility). As the present reporting applies at sub-fund level, the CSSF expects that the data provided meet the principles of representativeness and consistency.

**Reporting currency:** The UCITS risk reporting shall state under the functional data section the base currency in which the financial figures of the UCITS are expressed. That currency shall be the same as the one disclosed in the constitutive documents and the prospectus of the UCITS. All monetary values are to be provided in the base currency of the UCITS unless specified otherwise.

---

For the avoidance of doubt, for UCITS set up as an umbrella fund, this threshold applies at sub-fund level.
**Period covered:** The reporting covers a period of six months. Requested information concerns both data referring to the semester-end and data referring to the reference period of 6 months.

**Subsequent reportings:** Each subsequent reporting will give rise to a “new” circular letter addressed by the CSSF to the industry.

**Data to be provided: Information to be provided is underlined and displayed with a bullet point.**

For completeness purposes, we might want to stress the following principles to be observed for the completion of the reporting:

- The definitions and explanatory notes for each data item of the reporting contained in the guidelines shall be read carefully before filling in the reporting.

- No cells or comments shall be added to the Excel spreadsheet of the reporting. If in any case you want to provide us with additional information to the one requested in the reporting, this information shall be included in the accompanying e-mail sent to the CSSF when submitting the UCITS risk reporting.

- Drop downs menus in Excel shall be used where provided in the reporting.

- Cells remaining grey shaded as a result of the input of the requested data shall not be filled in.

- Each Excel file submitted shall contain information from only one single management company or self-managed investment company.

- For data items referring to a minimum, a maximum or an average value for the reference period of 6 months under consideration (e.g. arithmetic average borrowing during the reference semester, minimum securities lending during the reference semester, etc.), all observation points, as further specified in the present guidelines (e.g. Section V on EPM techniques – a minimum of 6 observation points per semester; Section VII.G on use of borrowing – information shall be based on all NAV-based data available), shall be taken into account, including those that have a value of 0 (e.g. no securities lending at given observation points).

- The value at semester-end shall also be taken into account for data items referring to the reference period of 6 months.

- For data items referring to the value at semester-end and that take a value of 0 (e.g. UCITS with a global exposure at semester-end under the commitment approach taking a value of 0), a value of 0 shall be filled in the relevant cell.

- Please do not fill in "N/A" or any other text for cells that are not applicable for the UCITS, but leave them blank unless otherwise specified in the Excel template.

- An example of a completed questionnaire is available on the CSSF website under the following URL: https://www.cssf.lu/en/Document/urr-excel-reporting-file-template/
Section I: Functional data

Section scope: All Luxembourg domiciled UCITS (irrespectively of their total net assets and average level of leverage used over the reference semester).

Section content: General information on UCITS.

A. Identifiers

Following from the section "Key principles and instructions", please note that the URL links provided below will be available on the CSSF website as from 15 July 2021.

- **CSSF code of the entity**
  This item refers to the CSSF code of the entity available on the CSSF website under the following URL as the referenced number in field “MMMMMMMM”.
  

- **CSSF code of the sub-fund**
  This item refers to the CSSF code of the sub-fund available on the CSSF website under the following URL as the referenced number in field “CCCCCCCC” or “0” for non umbrella entity.
  

- **Name of the UCITS**
  This item refers to the name of the UCITS as mentioned in the prospectus which is composed of the name of the entity and of the sub-fund in the case of an umbrella UCITS and only of the name of the entity in the case of a non-umbrella UCITS.

  The names of the UCITS can be found on the CSSF website under the following URL:


  Examples:

  - *In the case of an umbrella UCITS named “General Investment Fund” with the sub-fund named “European Equities”, the “Name of the UCITS” item has to be filled in with the following content: “General Investment Fund – European Equities”.
  - *In the case of a non umbrella UCITS, named “Investment Fund”, the “Name of the UCITS” item has to be filled in with the following content: “Investment Fund”.

- **Base currency**
  This item refers to the base currency of the UCITS in which the total net assets are expressed as laid down in the constitutive documents and prospectus. The base currency of the UCITS has to be reported by using the ISO 4217 codes (e.g. EUR, USD).
B. General information

- **Total net assets in base currency at semester-end**
  This item refers to the total net assets of the UCITS as provided within the monthly U1.1 reporting communicated to the CSSF. For UCITS that have not yet been launched (non-launched UCITS) since approval by the CSSF or that became inactive following the full redemption of their units (and then await reactivation) and that as consequence submit a U1.1 “null” report, the TNA has to be filled in with a value of 0. UCITS that have been liquidated during the semester should not be included in the UCITS Risk Reporting.

- **Total net assets in EUR at semester-end**
  This item refers to the total net assets of the UCITS in base currency converted to EUR by using the relevant exchange rate as at the end of the reference semester.

- **Global exposure calculation method**
  This item refers to the global exposure method as used by the UCITS pursuant to article 42(3) of the 2010 Law: Commitment, Absolute VaR or Relative VaR.

For UCITS using a VaR method for calculating their global exposure the following information is also to be provided in accordance with the guidance given hereafter:

- **Expected level of leverage of the UCITS - lower limit**
- **Expected level of leverage of the UCITS - average**
- **Expected level of leverage of the UCITS - upper limit**

These items refer to the expected level of leverage (calculated as the sum of the notionals of the derivatives used) as specified in the UCITS prospectus in accordance with the CESR guidelines on Risk Measurement (expressed in percentage of the total net assets of the UCITS).

Examples:

*Prospectus 1 discloses: “The average leverage of the sub-fund, under normal market conditions, calculated as the sum of the notionals of the financial derivative instruments used, is expected to be 150%, although higher levels are possible”*

*UCITS should fill in the field “Expected level of leverage of the UCITS – average” with 150%.*

*Prospectus 2 discloses: “Expected Range of Leverage Level : 200% - 500% [...] Shareholders should note that the above expected leverage levels are a representative guide only and should not be regarded as imposing limits which may not be exceeded”*
UCITS should fill in the field “Expected level of leverage of the UCITS - lower limit” with 200% and the field “Expected level of leverage of the UCITS - upper limit” with 500%.

Prospectus 3 discloses: “Expected Level of Leverage: 200% […] Maximum Expected Level of Leverage: 300%”

UCITS should fill in the field “Expected level of leverage of the UCITS – average” with 200% and the field “Expected level of leverage of the UCITS – upper limit” with 300%

- Arithmetic average leverage during semester
  This item refers to the average level of leverage (calculated as the sum of the notional of the derivatives used) observed over the reference semester. It should be determined by reference to at least bi-monthly data (i.e. 12 observation points per semester) in accordance with the regulatory provisions set forth in CSSF Circular 11/512.

In addition to the mandatory disclosure of the expected level of leverage in terms of the sum of the notional of the derivatives used as required by the CESR’s guidelines on Risk Measurement, the CSSF does observe that some UCITS using a VaR approach for global exposure calculation purposes also disclose the expected level leverage pursuant to the commitment approach in their prospectus. These UCITS should provide the following additional information:

- Expected level of leverage of the UCITS (based on commitment approach) - lower limit
- Expected level of leverage of the UCITS (based on commitment approach) - average
- Expected level of leverage of the UCITS (based on commitment approach) - upper limit

The above mentioned UCITS which use a VaR approach for global exposure calculation purposes and also disclose the expected level leverage pursuant to the commitment approach in their prospectus, as well as all the UCITS which use the commitment method for calculating their global exposure should provide the following information:

- Arithmetic average leverage during semester (based on commitment approach)
  This item refers to the average level of leverage (based on the commitment approach) observed over the reference semester. It should be determined by reference to all the values calculated during the reference semester.
Section II: Key investment strategy

Section scope: UCITS within the reporting scope.

Section content: Information on investment strategy pursued by UCITS to meet the investment objective.

Following guidance is to be observed:

▪ information should be derived from the primary investment policy and strategy as laid down in the prospectus and not on the basis of the actual investments made;
▪ information should be derived by considering both direct and indirect investments in accordance with the provisions of the prospectus;
▪ information, in case of fund of fund structures, should be derived by looking at the underlying investments of the UCIs as targeted by the prospectus.

A. Investment strategy

▪ Principal asset class
  The item refers to the primary asset class of the UCITS, thereby choosing between:
  - Equity;
  - Investment Grade Bonds;
  - High Yield Bonds;
  - General Bonds;
  - Convertible Bonds;
  - Money Market Instruments;
  - ABS/MBS;
  - Foreign Exchange;
  - Commodities;
  - Volatility;
  - Mixed Equity / Bonds;
  - Mixed Other (please specify);
  - Other (please specify).

Examples:

- A UCITS investing primarily (at least 50% of the assets) in equities should be classified as "Equity".
- A UCITS investing in both equities and bonds where the limits of the two asset classes lie close to 50% should be classified as "Mixed Equity / Bonds".
- A UCITS investing at least 90% of the assets in investment grade bonds should be classified as "Investment Grade Bonds".
- A UCITS that can invest up to 70% of the assets in equities and up to 60% in investment grade bonds should be classified as "Mixed Equity / Bonds".
- A UCITS that can invest in commodities and foreign exchange up to 90% should be classified as "Mixed Other".
• **Principal investment strategy:**
  The item refers to the primary investment strategy of the UCITS, thereby choosing between:
  - Long;
  - Short;
  - Long-Short;
  - Market-neutral;
  - Arbitrage;
  - Unconstrained / Multi-strategy.

*Examples:*
- A UCITS pursuing a relative value strategy with a potential directional bias should be classified as “Long-Short”.
- A UCITS pursuing a convertible bond arbitrage strategy should be classified as “Arbitrage”.
- A UCITS pursuing a bond basis arbitrage strategy should be classified as “Arbitrage”.
- A UCITS pursuing an absolute return strategy and investing in a wide variety of asset classes should be classified as “Unconstrained / Multi Strategy”.
- A UCITS pursuing a Long-only strategy on equities should be classified as “Long”.

**B. Region and market**

• **Geographical focus:**
  This item refers to the primary region in which the UCITS invests:
  - Africa;
  - Asia & Pacific;
  - Europe;
  - North America;
  - Central & South America;
  - Multiple Region.

*Examples:*
- A UCITS investing primarily in Europe should be classified under “Europe”.
- A UCITS that does act on a global basis with no geographic focus should be classified as “Multiple Region”.

• **Type of market:**
  This item refers to the primary market in which the UCITS invests:
  - Developed;
  - Emerging;
  - Mixed.

*Examples:*
- A UCITS that can invest on primary basis in both developed and emerging markets should be classified under “Mixed”.
- A UCITS that will invest at least 75% in developed markets should be classified as “Developed”.

---

**GUIDELINES ON THE UCITS RISK REPORTING**

*Unrestricted Version: 30 June 2021*
Section III: Global exposure and leverage

Section scope: UCITS within the reporting scope unless otherwise specified in sub-section scope.

Section content: Data on global exposure pursuant to art 42(3) of the 2010 Law and the use of leverage.

A. Global exposure using the commitment approach and legal limitation

Sub-section scope: UCITS within the reporting scope which use the commitment method to calculate their global exposure.

Sub-section content: Global exposure in percentage of the total net assets in accordance with the provisions laid down in the CESR’s guidelines on Risk Measurement. In particular, the commitment method should be calculated by taking into account global exposure arising from the use of Efficient Portfolio Management Techniques and without considering exposure from borrowings.

Information (minimum, maximum, average) as referred to below should be based on all the commitment values calculated during the reference semester. As a reminder, article 46 of CSSF Regulation 10-4 requires global exposure to be calculated at least on a daily basis.

- Global exposure at semester-end
- Minimum global exposure during the semester
- Maximum global exposure during the semester
- Arithmetic average global exposure during the semester
- Global exposure legal limit breach
  This item refers to the number of days where the legal global exposure limit (i.e. 100% of the total net assets of the UCITS) has been breached during the reference semester.

B. Information on absolute VaR method

Sub-section scope: UCITS within the reporting scope which use a VaR method to calculate their global exposure, irrespective of whether they use the absolute VaR or the relative VaR method.

Sub-section content: Absolute VaR expressed in percentage of the total net assets of the UCITS, calculated in accordance with the requirements set out in Box 15 of the CESR’s guidelines on Risk Measurement and determined on the basis of a 99% confidence interval and a holding period of 20 business days. In case a confidence interval and/or holding period differing from the parameters above (99%, 20 days) are used for the calculation of the VaR, the absolute VaR figure calculated should be rescaled to a VaR with a 99% confidence interval and a holding period of 20 business days.
Information (minimum, maximum, average) as referred below should be based on all the VaR figures calculated during the reference semester and should be expressed as a positive percentage. As a reminder, article 46 of CSSF Regulation 10-4 requires global exposure to be calculated at least on a daily basis.

- **Absolute VaR at semester-end**
- **Minimum absolute VaR during the reference semester**
- **Maximum absolute VaR during the reference semester**
- **Arithmetic average absolute VaR during the reference semester**

**C. Global exposure using a relative VaR method**

*Sub-section scope:* UCITS within the reporting scope which use a relative VaR method to calculate their global exposure.

*Sub-section content:* Relative VaR calculated in accordance with the requirements set out in Box 12 and Box 15 of the CESR’s guidelines on Risk Measurement. Relative VaR should be expressed on a 200% basis, using the formula as follows:

\[
\frac{\text{VaR UCITS}}{\text{VaR Reference Portfolio}} \times 100
\]

Information (minimum, maximum, average) as referred to below should be based on all the VaR calculated during the reference semester. As a reminder, article 46 of CSSF Regulation 10-4 requires global exposure to be calculated at least on a daily basis.

- **Relative VaR at semester-end**
  
  **Examples:**
  - Assume at the semester-end that the UCITS’ VaR is equal to 15% and the VaR of the reference portfolio is equal to 10%. The relative VaR calculated in accordance with the formula hereinabove is thus equal to 150%.
  - Assume at the semester-end that the UCITS’ VaR is equal to 6% and the VaR of the reference portfolio is equal to 10%. The relative VaR calculated in accordance with the formula hereinabove is thus equal to 60%.

- **Minimum relative VaR during the reference semester**
- **Maximum relative VaR during the reference semester**
- **Arithmetic average relative VaR during the reference semester**

**D. VaR limits and back testing**

*Sub-section scope:* UCITS within the reporting scope which use a VaR method to calculate their global exposure.
For the VaR limit breaches, the information to be provided should consider all breaches occurred over the reference period. As a reminder, article 46 of CSSF Regulation 10-4 requires global exposure to be calculated at least on a daily basis.

- **Maximum internal VaR limit**
  Maximum internal limit, as laid down in Box 10 of CESR’s guidelines on Risk Measurement, used to monitor the VaR determined on the basis of a 99% confidence interval and a holding period of 20 business days. In case of relative VaR, please refer to the formula set out in the previous sub-section III.C.

  **Examples:**
  - Assume the UCITS is using an absolute VaR method with a 15% internal limit. The UCITS should thus report 15%.
  - Assume the UCITS is using a relative VaR method with an internal limit set as a 1.8 ratio (e.g. when the VaR of the reference portfolio is 1%, the UCITS VaR can be up to 1.8%). The UCITS should thus report 180%.

- **Contractual VaR limit**
  If applicable, the limit disclosed in the prospectus for the VaR determined on the basis of a 99% confidence interval and a holding period of 20 business days. In case of relative VaR, please refer to the formula set out in the previous sub-section III.C.

- **Maximum internal VaR limit breach**
  Number of days where the maximum internal VaR limit has been breached during the reference semester.

- **Contractual VaR limit breach**
  If applicable, the number of days where the contractual limit - as disclosed in the prospectus – has been breached during the reference semester.

- **Regulatory VaR limit breach**
  Number of days where the regulatory VaR limit (i.e. 20% in case of absolute VaR or 200% in case of relative VaR) has been breached during the reference semester.

- **Regulatory VaR limit breach comments**
  If applicable, a short explanation not exceeding 200 characters on the regulatory VaR limit breaches as well as related corrective measures (if any) taken. The description should at least include the VaR figure along with the occurring date, the sources of breach and the action taken (if any).

---

5 A UCITS should always set the maximum VaR limit according to its defined risk profile.

6 In case a confidence interval and/or holding period differing from the parameters above (99%, 20 days) are used for the maximum internal VaR limit, the limit should be rescaled to a VaR limit with a 99% confidence interval and a holding period of 20 business days.

7 In case a confidence interval and/or holding period differing from the parameters above (99%, 20 days) are used for the contractual VaR limit, the limit should be rescaled to a VaR limit with a 99% confidence interval and a holding period of 20 business days.
Examples:
- \( \text{VaR}=x\% \) on \( dd/mm/yyyy \) market volatility increased following the exceptional event \( xyz \). Measures: none.
- \( \text{VaR}=y\% \) on \( dd/mm/yyyy \) substantial VaR increase following from the conclusion of new equity futures positions. Measures: sale of futures positions.

- **Back Testing result**
  Number of overshoots occurred during the last 250 days at reference date based on a 99% confidence interval. Each day with an overshoot should be counted, even in the case of a sequence of overshoots resulting from one common specific event. Back testing should be carried out in accordance with the provisions laid down in Box 18 of the CESR’s guidelines on Risk Measurement.

- **Back Testing result assessment**
  When the number of overshoots occurred during the last 250 days at reference date exceeds 4, UCITS should provide a brief analysis / explanation of the sources of the overshoots and a statement on measures taken (if any) to improve the accuracy of the model (see provisions laid down in points 5 and 6 of Box 18 of the CESR’s guidelines on Risk Measurement). The assessment should not exceed 200 characters.

  - Main overshoots: 16/03/16 – ECB speech, 17/06/16 & 24/06/16 – Brexit; Origin: increased volatility, Measures: none
  - Overshoots mainly due to improper modelling of \([xyz]\) risk factor. Measures: review of \([xyz]\) risk factor coverage.

- **Minimum overshoot amount in excess of the VaR**
  When the number of overshoots occurred during the last 250 days at reference date exceeds 4, UCITS should provide the minimum overshoot amount amongst all the overshoots occurred expressed as positive percentage of the VaR (i.e. loss in excess of the one-day VaR measure calculated by the model divided by the VaR).

  Example: Assume the one-day loss in the UCITS portfolio is \(-1.5\%\) and the related one-day VaR measure being equal to \(1\%\). The UCITS should thus report \(50\%\) as the loss in excess of the VaR.

- **Maximum overshoot amount in excess of the VaR**
  When the number of overshoots occurred during the last 250 days at reference date exceeds 4, UCITS should provide the maximum overshoot amount amongst all the overshoots occurred expressed as positive percentage of the VaR (i.e. loss in excess of the one-day VaR measure calculated by the model divided by the VaR).

\[8\] In case a confidence interval differing from 99% is used, the VaR should be rescaled to a VaR at a 99% confidence interval.
E. Realized leverage using the sum of notional method during the reference semester

**Sub-section scope:** UCITS within the reporting scope which use a VaR method to calculate their global exposure.

**Sub-section content:** Utilisation of the leverage arising from the use of financial derivative instruments using the sum of notional method as described in the CESR’s guidelines on Risk Measurement during the reference semester.

UCITS should carry out calculation based on at least bi-monthly data (e.g. 12 observation points per semester).

Information should be expressed as a percentage of the total net assets of the UCITS.

- Minimum leverage of the UCITS during the reference semester
- Maximum leverage of the UCITS during the reference semester
- Arithmetic average leverage of the UCITS during the reference semester

F. Breakdown of the leverage per risk factor using the sum of notional method

**Sub-section scope:** UCITS within the reporting scope which use a VaR method to calculate their global exposure.

**Sub-section content:** Breakdown of the leverage arising from the use of financial derivative instruments using the sum of notional method as described in the CESR’s guidelines on Risk Measurement at semester-end.

Long and short exposures are determined by reference to the exposure to the underlying of the financial derivative instruments.

Information should be expressed as a percentage (in absolute value 9) of the total net assets of the UCITS.

- Total leverage of the UCITS
  Total leverage of the UCITS arising from the use of financial derivative instruments. Total leverage of the UCITS should be equal to the sum of the remaining sub-section fields.

9 A positive value for both long and short exposures.
• **Leverage on equities**
  Leverage arising from the use of financial derivative instruments whose prices are dependent on equity and equity like securities, broken down by the direction of the exposure:
  - Long equity exposure
  - Short equity exposure.

  *Example 1:* The UCITS holds a total rate of return swap whereby it pays the performance of the CAC 40 index and receives the performance of the NIKKEI. The UCITS should thus report the notional amount relative to the NIKKEI leg as a long equity exposure and the CAC 40 leg as a short equity exposure.

  *Example 2:* The UCITS holds a total rate of return swap whereby it pays a floating rate (e.g. Libor) plus a spread and receives the performance of a basket of equities. The UCITS should thus report the notional amount of the total rate of return swap as a long equity exposure.

  *Example 3:* The UCITS invests in a short position on a put option on the DAX index. The UCITS should thus report the notional amount of the option as a long equity exposure.

  *Example 4:* The UCITS invests in a long position on a put option on the FTSE index. The UCITS should thus report the notional amount of the option as a short equity exposure.

  *Example 5:* The UCITS invests in a short position on the DAX index future. The UCITS should thus report the notional amount of the future as a short equity exposure.

• **Leverage on fixed income/interest rate**
  Leverage arising from the use of financial derivative instruments whose prices are dependent on the value of fixed income securities or on the level of interest rates, broken down by the maturity of the underlying:
  - ≤ 3 months (e.g. 1-month EONIA SWAP)
  - > 3 months and ≤ 12 months
  - > 1 year and ≤ 5 years
  - > 5 years (e.g. US 10Y T-Note future contract),

  and by the sign of the duration of the instrument:

  - Positive interest rate duration (e.g. positive sensitivity to a parallel decrease of the interest rate curve by 1 bp, and negative sensitivity to a parallel increase of the interest rate curve by 1 bp)
  - Negative interest rate duration (e.g. negative sensitivity to a parallel decrease of the interest rate curve by 1 bp, and positive sensitivity to a parallel increase of the interest rate curve by 1 bp).

  *Examples:*
  *If the UCITS is the fixed rate payer in a fixed-for-floating IR swap it should report in the negative interest rate duration category. If the UCITS is the fixed rate receiver it should report in the positive interest rate duration category.*
If the UCITS is the buyer of a bond future or a short term interest rate future, it should report in positive interest rate duration category.

If the UCITS is the seller of such a future, it should report in negative interest rate duration category.

- **Leverage on credit**
  Leverage arising from the use of financial derivative instruments whose prices are mainly dependent on the level of credit spreads of a given reference debt security or basket/index of reference debt securities (e.g. CDS), broken down by the sign of the duration of the instrument:

  - **Positive credit spread duration** (e.g. positive sensitivity to a parallel tightening of the credit spread curve by 1 bp, and negative sensitivity to a parallel widening of the credit spread curve by 1 bp)
  - **Negative credit spread duration** (e.g. negative sensitivity to a parallel tightening of the credit spread curve by 1 bp, and positive sensitivity to a parallel widening of the credit spread curve by 1 bp).

  **Example:**
  If the UCITS acts as iTraxx CDS protection seller it should report the position as positive credit spread duration. If it acts as iTraxx CDS protection buyer it should report as negative credit spread duration.

- **Leverage on foreign exchange**
  Leverage arising from the use of financial derivative instruments whose prices are dependent on a foreign currency or a basket of foreign currencies.

- **Leverage on commodities**
  Leverage arising from the use of financial derivative instruments whose prices are dependent on commodities and equivalent, broken down by the direction of the exposure:
  - **Long commodity exposure**
  - **Short commodity exposure**

- **Leverage on volatility**
  Leverage arising from the use of financial derivative instruments whose price is dependent on volatility value (e.g. future on VIX index, volatility or variance swaps), broken down by the direction of the exposure:
  - **Long volatility exposure** (e.g. positive sensitivity to an increase of the volatility level)
  - **Short volatility exposure** (e.g. negative sensitivity to an increase of the volatility level).

- **Leverage on other underlying**
  Leverage arising from the use of financial derivative instruments other than the ones mentioned above.

**G. Leverage relative to the use of Efficient Portfolio Management (EPM) techniques**

*Sub-section scope:* UCITS within the reporting scope (both UCITS which use a VaR method to calculate their global exposure and UCITS using the commitment approach).
Leverage arising from the use of EPM techniques
Refers to the leverage arising from the reinvestment of cash collateral received in the context of EPM in financial assets that provide a return in excess of the risk-free return, pursuant to Box 9 of the CESR’s guidelines on Risk Measurement expressed in percentage of the total net assets of the UCITS.

H. Sum of notional amounts per derivative category

Sub-section scope: UCITS within the reporting scope (both UCITS which use a VaR method to calculate their global exposure and UCITS using the commitment approach).

Sub-section content: The sum of the notional amounts of all derivatives at semester-end (expressed in percentage of the total net assets) within each of the following categories:

- **Futures:**
  - Equity
  - Fixed Income / Interest rate
  - Other

- **Swaps:**
  - Interest rate swaps
  - Total return swaps
  - Credit default swaps
  - Contracts for difference
  - Other

- **Forwards:**
  - FX
  - Other

- **Options:**
  - Equity
  - Interest rate
  - Other

Examples:

- A bond future (10 Year Bund) or a 3 month Euribor future should be reported under "Futures – Fixed Income / Interest rate”.

- A fixed-for-floating interest rate swap should be reported under "Swaps – Interest rate swaps”.

Section IV: Stress testing and other risk indicators

Section scope: UCITS within the reporting scope unless otherwise specified in sub-section scope.

A. Univariate stress tests

Sub-section scope: UCITS within the reporting scope (both UCITS which use a VaR method to calculate their global exposure and UCITS using the commitment approach)

In accordance with article 45 of the CSSF Regulation 10-4 management companies / investment companies should conduct, where appropriate, periodic stress tests and scenario analyses to address risks arising from potential changes in market conditions that might adversely impact the UCITS. In addition, in accordance with Box 1 and Box 19 of the CESR’s guidelines on Risk Measurement, UCITS using a VaR approach have to conduct an adequate stress test program. As a consequence, both UCITS using a VaR or the commitment approach fall in the scope of the stress testing requirements.

Sub-section content: Univariate stress test (i.e. without considering any dependencies/correlations between risk factors) at semester-end for each of the following assumptions. Stress tests should be performed on all the positions (including derivative positions) of the portfolio.

Information should be expressed as a percentage of the total net assets of the UCITS.

- **Stock markets: - 30%**
  This item refers to the impact on the NAV when all stocks lose 30% (without any adjustments for beta) and all equity based assets are re-priced.

- **Stock markets: + 30%**
  This item refers to the impact on the NAV when all stocks gain 30% (without any adjustments for beta) and all equity based assets are re-priced.

- **IR curves: parallel shift +200bps**
  This item refers to the impact on the NAV when all interest rates for all maturities are shifted up by 200bps and all interest rate based assets are re-priced.

- **Credit spreads: proportional shift -50%**
  This item refers to the impact on the NAV when all credit spreads for all maturities are halved and all assets exposed to credit rates are re-priced.

- **Credit spreads: proportional shift +100%**
  This item refers to the impact on the NAV when all credit spreads for all maturities are doubled and all assets exposed to credit rates are re-priced.

- **FX: base currency vs other currencies -30%** (i.e. depreciation of the base currency)

  Example: The base currency of the UCITS is USD and its portfolio contains assets denominated in and/or derivatives contingent on EUR, GBP and USD. The result of this stress test is the impact (in %) on the UCITS NAV (in USD) when USD depreciates by 30% versus EUR and GBP while the nominal asset prices remain constant.
A fund which invests only in assets denominated in foreign currencies (non-hedged and without any derivatives) would therefore report a **gain** under this scenario.

The following example illustrates the FX -30% scenario for a fund whose base currency is USD and which invests only in assets denominated in EUR (non-hedged and without any derivatives). Starting from an EUR/USD exchange rate of 1.11 (i.e. 1 USD = 1 / 1.11 EUR = 0.9 EUR), the 30% depreciation of USD versus EUR (i.e. 1 USD = 0.9 * (1 – 30%) EUR = 0.63 EUR) hence gives the following stress test result:

<table>
<thead>
<tr>
<th>TNA in ccy (EUR)</th>
<th>USD/EUR</th>
<th>TNA in base ccy (USD)</th>
<th>ST result</th>
</tr>
</thead>
<tbody>
<tr>
<td>- starting point (i.e. no change of exchange rate)</td>
<td>1.00</td>
<td>0.90</td>
<td>1.11</td>
</tr>
<tr>
<td>- stressed scenario (FX -30%)</td>
<td>1.00</td>
<td>0.63</td>
<td>1.59</td>
</tr>
</tbody>
</table>

**FX: base currency vs other currencies +30% (i.e. appreciation of the base currency)**

Example: The base currency of the UCITS is USD and its portfolio contains assets denominated in and/or derivatives contingent on EUR, GBP and USD. The result of this stress test is the impact (in %) on the UCITS NAV (in USD) when USD appreciates by 30% versus EUR and GBP while the nominal asset prices remain constant.

A fund which invests only in assets denominated in foreign currencies (non-hedged and without any derivatives) would therefore report a **loss** under this scenario.

The following example illustrates the FX +30% scenario for a fund whose base currency is USD and which invests only in assets denominated in EUR (non-hedged and without any derivatives). Starting from an EUR/USD exchange rate of 1.11 (i.e. 1 USD = 1 / 1.11 EUR = 0.9 EUR), the 30% appreciation of USD versus EUR (i.e. 1 USD = 0.9 * (1 + 30%) EUR = 1.17 EUR) hence gives the following stress test result:

<table>
<thead>
<tr>
<th>TNA in ccy (EUR)</th>
<th>USD/EUR</th>
<th>TNA in base ccy (USD)</th>
<th>ST result</th>
</tr>
</thead>
<tbody>
<tr>
<td>- starting point (i.e. no change of exchange rate)</td>
<td>1.00</td>
<td>0.90</td>
<td>1.11</td>
</tr>
<tr>
<td>- stressed scenario (FX +30%)</td>
<td>1.00</td>
<td>1.17</td>
<td>0.85</td>
</tr>
</tbody>
</table>

**N.B:** The foregoing scenarios are based on stress testing policy commonly designed by the UCITS and may not constitute any market predictions from the CSSF.
B. Most relevant stress tests

Sub-section scope: UCITS within the reporting scope which use a VaR method to calculate their global exposure.

Sub-section content: Information on the 3 most relevant stress scenarios selected and tested over the semester comprising a short description of the stress test scenarios, the corresponding results at semester-end and holding period (expressed in number of business days).

Please note that the most relevant stress scenarios are not necessarily those which exhibit the worst results but scenarios the management companies / investment companies consider the most adequate with reference to the investment policy, risk profile, market conditions or assets class.

- Most relevant scenario description (200 characters maximum)
  Example: Black Monday – Oct 1987, main equity indexes – 20%, USD IR – 10%,

- Most relevant scenario result
  Example: -15%,

- Most relevant scenario holding period (in number of business days)
  The holding period refers to the number of business days underlying the calibration of the risk factor shifts and as consequence to the observation period over which the portfolio impact pursuant to the stress test scenarios is calculated.
  Example: An historical scenario based on the events that occurred on the day of Lehman Brothers’s filing for bankruptcy protection would have a holding period of 1 business day, while a scenario based on the same events, with market data over a one week or one month period would have holding periods of 5 business days (i.e. 1 week), respectively 20 business days (i.e. 1 month).

- 2nd most relevant scenario description (200 characters maximum)

- 2nd most relevant scenario result

- 2nd most relevant scenario holding period

- 3rd most relevant scenario description (200 characters maximum)

- 3rd most relevant scenario result

- 3rd most relevant scenario holding period
C. Other risk indicators

Sub-section scope: UCITS within the reporting scope (both UCITS which use a VaR method to calculate their global exposure and UCITS using the commitment approach)

- NAV volatility\(^{10}\)
  The annualized realized volatility of the NAV based on all the NAV data of the reference semester.

- Performance over the semester
  Performance realized over the reference semester.

- Minimum Synthetic Risk and Reward Indicator (SRRI) at semester-end
  The minimum SRRI among the UCITS active share classes.

- Maximum Synthetic Risk and Reward Indicator (SRRI) at semester-end
  The maximum SRRI among the UCITS active share classes.

\(^{10}\) For the sake of clarity, please note that subscriptions and redemption should be excluded when calculating realized volatility and performance (i.e. performance/volatility calculations should not be based on a simple variation of the total net assets of the UCITS).
Section V: Efficient portfolio management (EPM) techniques

Section scope: UCITS within the reporting scope.

Section content: Exposures arising from the use of EPM techniques by the UCITS.

In this section, UCITS should carry out calculation (minimum, maximum and arithmetic average) based on at least monthly data (i.e. 6 observation points per semester at minimum). NAV dates without EPM use should be taken into account with a value of 0.

A. Repurchase agreement transactions ("repo")

- Repurchase agreement transactions ("repo") at semester-end
  The market value of the securities sold to the counterparties of the repo transactions (in exchange of the cash received) at semester-end should be reported, without taking into account any netting effects and without considering the collateral received in order to mitigate the counterparty risk arising from these transactions.

  Example: The UCITS has entered into repo agreements with two counterparties A and B.

  Counterparty A:
  - Securities sold for a total market value of 100
  - Cash received for a value of 95

  Counterparty B:
  - Securities sold for a total market value of 50
  - Cash received for a value of 50

  The market value of the securities sold to the counterparties of the repo transactions at semester-end is thus equal to 150.

- Minimum repo during the reference semester
- Maximum repo during the reference semester
- Arithmetic average repo during the reference semester

B. Reverse repurchase agreement transactions ("reverse repo")

- Reverse repurchase agreement transactions ("reverse repo") at semester-end
  The value of the cash paid to the counterparties of reverse repo transactions (in exchange of securities bought) at semester-end should be reported, without taking into account any netting effects and without considering the collateral received in order to mitigate the counterparty risk arising from these transactions. Please note that reverse repo transactions which reinvest cash collateral received by the UCITS in the context of repo, securities lending transactions or OTC derivatives should also be taken into account.
Example: The UCITS has entered into reverse repo agreements with two counterparties A and B.
Counterparty A:
- Securities bought for a total market value of 100
- Cash paid for a value of 95

Counterparty B:
- Securities bought for a total market value of 60
- Cash paid for a value of 60

The value of the cash posted to the counterparties of reverse repo transactions at semester-end is thus equal to 155.

- Minimum reverse repo during the reference semester
- Maximum reverse repo during the reference semester
- Arithmetic average reverse repo during the reference semester

C. Securities lending

- Securities lending at semester-end
  The market value of the securities lent to the counterparties to these transactions at semester-end should be reported, without taking into account any netting effects or the collateral received.

- Minimum securities lending during the reference semester
- Maximum securities lending during the reference semester
- Arithmetic average securities lending during the reference semester
- Does the UCITS use agent lenders or other intermediaries for the securities lending transactions?
- Does the securities lending agent or any other entity indemnify the UCITS against borrower default on loans administered by this agent? [Y/N]
  This item refers to the existence or not of guarantees to the benefit of UCITS that cover potential losses associated with non-return of securities lent in case of borrower default (these losses are limited to the difference between the liquidation value of the collateral received and the replacement cost of the securities lent). This item does not concern indemnification agreements which cover losses due to operational reasons only.
D. Securities borrowing

- **Securities borrowing at semester-end**
  The market value of the securities or the value of the cash posted to counterparties at semester-end should be reported without taking into account any netting effects or the securities received.

- **Minimum securities borrowing during the reference semester**

- **Maximum securities borrowing during the reference semester**

- **Arithmetic average securities borrowing during the reference semester**
Section VI: Counterparty risk and collateral in relation to EPM techniques / OTC financial derivative instruments and traded derivatives

Section scope: UCITS within the reporting scope.

Section content: Counterparty risk exposure in accordance with Art. 43(1) of the 2010 Law, Art. 48 of the CSSF Regulation 10-4 and corresponding CESR/ESMA guidelines.

A. Positive net counterparty exposure at semester-end

Sub-section content: UCITS overall positive net counterparty exposure arising from EPM techniques and OTC financial derivative transactions.

For OTC financial derivative transactions the exposure should be calculated in accordance with article 48 of CSSF Regulation 10-4 considering that UCITS can take into account netting arrangements and collateral received provided that the conditions set forth in the aforesaid article are complied with.

For EPM techniques the exposure should be calculated in accordance with point 2 of Box 27 of the CESR’s guidelines on Risk Measurement.

Information should be expressed as a percentage of the total net assets of the UCITS.

- **Overall (positive) net exposure (mark to market) from EPM techniques at semester-end**
  Sum of individual positive net exposure to counterparties of the UCITS arising from EPM techniques.

- **Overall (positive) net exposure (mark to market) from OTC financial derivative transactions at semester-end**
  Sum of individual positive net exposure to counterparties of the UCITS arising from OTC financial derivative transactions.

Example: The UCITS has entered at the end of the reference semester into the following OTC derivative contracts with three counterparties A, B and C, with a legally enforceable netting agreement being in place in each case:

**Counterparty A:**
- A total return swap with a positive mark-to-market value for the UCITS of +50
- A FX forward with a negative mark-to-market value for the UCITS of -30
- Collateral received by the UCITS with a value of +15

The net counterparty exposure for the UCITS on counterparty A is thus positive and equal to +5.

**Counterparty B:**
- An equity option with a negative mark-to-market value for the UCITS of -50
- A bond option with a positive mark-to-market value for the UCITS of +45.
The net counterparty exposure for the UCITS on counterparty B is thus negative and equal to -5.

Counterparty C:
- A total return swap with a positive mark-to-market value for the UCITS of +20
- Collateral received by the UCITS with a value of +15

The net counterparty exposure for the UCITS on counterparty C is thus positive and equal to +5.

Assume the UCITS TNA at the semester end is 100, the sum of individual positive net counterparty exposure of the UCITS arising from OTC financial derivative transactions is thus equal to 10% of the UCITS TNA (sum of net exposures from counterparties A and C).

The counterparty name(s) and exposure(s) have to be filled in for the combined exposures from EPM techniques and from OTC financial derivative transactions.

Please indicate the exposure(s) in decreasing order.

- **Counterparty 1 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the greatest positive mark-to-market net counterparty exposure.

- **Counterparty 1 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the greatest positive mark-to-market net counterparty exposure.

- **Counterparty 1 net counterparty exposure**
  Net positive counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the greatest positive mark-to-market net counterparty exposure.

- **Counterparty 2 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the 2nd greatest positive mark-to-market net counterparty exposure.

- **Counterparty 2 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the 2nd greatest positive mark-to-market net counterparty exposure.

- **Counterparty 2 net counterparty exposure**
  Net positive counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the 2nd greatest positive mark-to-market net counterparty exposure.

- **Counterparty 3 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the 3rd greatest positive mark-to-market net counterparty exposure.

- **Counterparty 3 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the 3rd greatest positive mark-to-market net counterparty exposure.

- **Counterparty 3 net counterparty exposure**
  Net positive counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the 3rd greatest positive mark-to-market net counterparty exposure.
Net positive counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the 3rd greatest positive mark-to-market net counterparty exposure.

B. Negative net counterparty exposure at semester-end

Sub-section content: UCITS overall negative\(^1\) net counterparty exposure arising from EPM techniques and OTC financial derivative transactions.

For OTC financial derivative transactions the exposure should be calculated in accordance with article 48 of CSSF Regulation 10/4, further supplemented by Box 26 and Box 27 of the CESR’s guidelines on Risk Measurement, considering that UCITS can take into account netting arrangements and collateral received provided that the conditions set forth in the aforesaid article are complied with.

For EPM techniques the exposure should be calculated in accordance with point 2 of Box 27 of the CESR’s guidelines on Risk Measurement.

Information should be expressed as a percentage (in absolute value) of the total net assets of the UCITS.

- **Overall (negative) net exposure (mark to market) from EPM techniques at semester-end**
  Sum of individual negative net exposure of the UCITS to counterparties arising from EPM techniques.

- **Overall (negative) net exposure (mark to market) from OTC financial derivative transactions at semester-end**
  Sum of individual negative net exposure of the UCITS to counterparties arising from OTC financial derivative transactions.

Examples:

1) By reference to the previous example, the sum of individual negative net exposure of the UCITS arising from OTC financial derivative transactions is thus equal to 5% of the UCITS TNA (sum of net exposures from counterparty B).

2) Securities lending agreement with counterparty A:

   - Securities lent for a total market value of 100
   - Cash received as collateral for a value of 105

Assume the UCITS TNA at the semester end is 100, the sum of individual negative net exposure of the UCITS arising from the EPM is thus equal to 5% of the UCITS TNA (arising from the over-collateralization from counterparty A).

The counterparty name(s) and exposure(s) have to be filled in for the combined exposures from EPM techniques and from OTC financial derivative transactions.

\(^1\) A net negative exposure of the UCITS corresponds to a positive net exposure of the counterparty to the UCITS.
Please indicate the exposure(s) in decreasing order in absolute value.

- **Counterparty 1 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the greatest negative mark-to-market net counterparty exposure.

- **Counterparty 1 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the greatest negative mark-to-market net counterparty exposure.

- **Counterparty 1 net counterparty exposure**
  Net negative counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the greatest negative mark-to-market net counterparty exposure.

- **Counterparty 2 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the 2nd greatest negative mark-to-market net counterparty exposure.

- **Counterparty 2 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the 2nd greatest negative mark-to-market net counterparty exposure.

- **Counterparty 2 net counterparty exposure**
  Net negative counterparty exposure of the counterparty (excluding CCPs) to which the UCITS has the 2nd greatest negative mark-to-market net counterparty exposure.

- **Counterparty 3 name**
  Exact legal name of the counterparty (excluding CCPs) to which the UCITS has the 3rd greatest negative mark-to-market net counterparty exposure.

- **Counterparty 3 LEI code**
  LEI code of the counterparty (excluding CCPs) to which the UCITS has the 3rd greatest negative mark-to-market net counterparty exposure.

- **Counterparty 3 net counterparty exposure**
  Net negative counterparty exposure for this counterparty (excluding CCPs) to which the UCITS has the 3rd greatest negative mark-to-market net counterparty exposure.

### C. Collateral received at semester-end

**Sub-section content:** Collateral received by the UCITS in the context of OTC financial derivative instruments or EPM techniques which should comply with the requirements laid down in section XII of the "ESMA’s Guidelines on ETFs and other UCITS issues" (Ref. 14-937) (hereafter “the ESMA’s guidelines on ETFs”). Haircuts applied to the collateral value and netting effects should not be taken into account. Please note that in accordance with point 42 of the ESMA guidelines on ETFs, all assets received by the UCITS in the context of EPM techniques should be considered as collateral.

- **Value of collateral received in the context of EPM techniques**
  The value of collateral received at semester-end in order to mitigate the counterparty risk arising from EPM techniques.
Example: The UCITS has entered into EPM techniques with counterparties A and B.

Repo agreement with counterparty A:
- Securities sold for a total market value of 100
- Cash received for a value of 95

The collateral received from counterparty A is thus equal to 95.

Reverse repo agreement with counterparty B:
- Securities bought for a total market value of 100
- Cash paid for a value of 95

The collateral received from counterparty B is thus equal to 100

The total value of collateral received in the context of EPM technique is thus equal to 195.

- Value of collateral received in the context of OTC financial derivative transactions
  The value of collateral received at semester-end in order to mitigate the counterparty risk arising from OTC financial derivative instruments.

For all the cash collateral held by the UCITS at semester-end, the value of cash collateral received which in accordance with the provisions of point 43 j) of the ESMA’s guidelines on ETFs has been:

- placed\(^{12}\) on deposit with a credit institution in accordance with article 41(1)f) of the 2010 Law
- invested in high-quality government bonds
- used for the purpose of reverse repo transactions with credit institutions subject to prudential supervision and where the UCITS is able to recall at any time the full amount of cash on accrued basis
- invested in short-term money market funds as defined in the Guidelines on a common definition of European Money Market Funds

D. Collateral posted at semester-end

Sub-section content: Collateral posted by the UCITS in the context of OTC financial derivative transactions. UCITS should report the value of the collateral at semester-end. Netting effects should not be taken into account.

- Value of collateral posted in the context of OTC financial derivative transactions
  The value of collateral posted at semester-end relating to OTC financial derivative transactions.

\(^{12}\) For avoidance of doubt, all cash collateral held on cash account with a credit institution is to be considered under this data item.
E. Information on trading of financial derivative instruments at semester-end

Sub-section content: Regarding the financial derivative instruments held in portfolio at semester-end, refers to the percentage of the notional amount of financial derivative instruments traded on:

- A regulated exchange
- OTC

Example:
Assume the UCITS trades derivatives as below:

- Listed options for a total notional amount of 120
- FX forwards with counterparty A for a total notional amount of 60
- CDS dealt on an OTC basis and cleared through a CCP for a total notional amount of 20

The percentage of the notional amount of financial derivative instruments traded on a regulated exchange is thus equal to 60% (listed options) and the percentage of the notional amount of financial derivative instruments traded OTC is thus equal to 40% (CDS and FX forwards).

Sum of both items should be equal to 100%.

F. Information on clearing of OTC financial derivative instruments at semester-end

Sub-section content: Regarding the financial derivative instruments held in portfolio at semester-end, refers to the percentage of the notional amount of financial derivative instruments cleared through CCP or bilaterally.

This sub-section has to be completed in case financial derivative instruments have been traded OTC (see sub-section E above)

- CCP
- Bilaterally

By reference to the previous example:

The percentage of the notional amount of OTC financial derivative instruments cleared through a CCP is thus equal to 25% (CDS) and the percentage of the notional amount of OTC financial derivative instruments cleared bilaterally is thus equal to 75% (FX forwards).

Sum of both items should be equal to 100%.
Section VII: Liquidity risk

Section scope: UCITS within the reporting scope.

Section content: Liquidity risk management and the liquidity risk profile of UCITS.

A. UCITS portfolio liquidity profile in normal market conditions at semester-end

- % of the portfolio capable of being liquidated within each period (1 day or less; 2-7 days; ...; more than 365 days) at semester-end
  Only positive percentages should be reported in the individual buckets and they should sum up to 100%

- Value of unencumbered cash at semester-end
  Refers to the amount of cash and cash equivalent available for immediate use without restriction.

B. UCITS portfolio liquidity profile in stressed market conditions at semester-end [OPTIONAL]

Sub-section scope: This sub-section is optional for all UCITS in the reporting scope

This section remains optional for the present reporting exercise as the CSSF acknowledges that this information is not necessarily readily available at this stage. However we would like to stress the importance of such data from a liquidity risk management perspective as also recognized in the context of the ongoing European/international discussion on market liquidity/liquidity mismatch.

Following from that, we strongly encourage management companies / investment companies to provide us with information on the portfolio liquidity profile under stressed market conditions on a best effort basis whenever feasible, in particular with regard to fixed income, money market and mixed UCITS.

- Description of the stress test scenario assumptions

- % of the portfolio capable of being liquidated, in stressed conditions, within each period (1 day or less; 2-7 days; ...; more than 365 days) at semester-end
  Only positive percentages should be reported in the individual buckets and they should sum up to 100%

C. Information on redemption

- Highest net redemption during the reference semester
  Refers to the highest net redemption (e.g. by taking into account subscription) occurred on a NAV date during the reference semester in % of total net assets of the UCITS at the redemption date.

- NAV date of the highest net redemption during the reference semester
  Refers to the NAV date on which the highest net redemption occurred.
• Notice period
  Refers to the notice period, expressed in number of business days, set forth in
  the prospectus as required by investors for redemptions.

D. UCITS shareholders at semester-end
Sub-section content: Breakdown of the ownership of units/shares of the UCITS by
investor group. Ultimate beneficial owners (look-through) should be reported where
known or possible on a best effort basis.

For the purpose of this sub-section, the CSSF expects management
companies / investment companies to undertake the necessary efforts to be
able to provide on a best effort basis such information from an ultimate
beneficial owner perspective.

Information should be expressed as a percentage of the total net assets of the UCITS.

• Non-financial corporation
• Banks (for own account)
• Collective investment scheme (e.g. fund of funds or master)
• Other financial institutions
• Insurance corporations
• Pension funds
• General government
• Households / retail investors
• Unknown.

• Percentage of the UCITS held by the 5 predominant shareholders at semester-end
  Percentage of the total net assets of the UCITS held by the 5 most important
  shareholders. By analogy to the previous, shareholders have to be viewed as
  the ultimate beneficial owners where known or possible on a best effort basis.

E. Liquidity management tools in accordance with the
constitutive documents / prospectus

Sub-section content: Are the following liquidity management tools available to the
UCITS in accordance with the constitutive documents / prospectus?

Fill in YES/NO for each of the following tools:

• Redemption gates / deferrals
• Swing-pricing
• Anti-dilution levy
• Temporary suspension of redemptions
• Other (if yes, please specify)
For instance, “redemption in kind” could be given under “Other” if the prospectus / management regulations / articles of incorporation does allow the UCITS to use it for liquidity management purposes. Another potential tool under “Other” could be liquidity fees.

F. Usage of ex-post liquidity management tools during the reference semester

Have any of the previously mentioned liquidity management tools been used by the reported UCITS in the past semester? If yes, please provide the number of days of usage.

- Redemption gates / deferrals
- Swing-pricing
- Anti-dilution levy
- Temporary suspension of redemptions
- Other (if yes, please specify)

G. Use of borrowing by the UCITS during the reference semester

*Sub-section content:* Use of borrowing in accordance with Art. 50. of the 2010 Law.¹⁴

Information (minimum, maximum, average) as referred below should be based on all NAV-based data available for the reference semester. Information should be expressed as a percentage (in absolute value) of the total net assets of the UCITS. NAV dates without borrowing should be taken into account as 0 values.

- Borrowing at semester-end
- Minimum borrowing during the reference semester
- Maximum borrowing during the reference semester
- Arithmetic average borrowing during the reference semester

¹³ Liquidities fees refer to fees on redemptions that adequately reflect the cost to the UCITS of achieving liquidity and ensure that investors who remain in the fund are not unfairly disadvantaged when other investors redeem their units or shares during the period.

¹⁴ The data on the use of borrowing as requested here refers to the calculation of the use of the borrowing limit done for regulatory purposes (i.e. investment compliance checks). Hence, if for the calculation of the 10% temporary borrowing limit set forth in art.50 of the 2010 Law, negative and positive positions of currency cash accounts held by the UCITS with the same legal counterpart are offset pursuant to the conditions laid down in the activity report 2009 of the CSSF, the same approach should be applied for providing the reporting data on borrowing requested in this sub-section.
H. Miscellaneous on liquidity management

- **Further approaches, if applicable**
  Can the UCITS avail itself (directly or indirectly, e.g. through the management company) of other tools to manage liquidity in adverse conditions (e.g. committed credit lines, inter-fund arrangements, or similar). If yes, please list them.

  Please note that uncommitted credit lines (e.g. temporary borrowing facility with depositary bank on an uncommitted basis) should not be considered in this context. For instance, the temporary borrowing under article 50(2)a) of the 2010 Law on the basis of an uncommitted credit line basis should not be reported under this heading.

- **Liquidity stress testing**
  Does the management company/self managed investment company regularly conduct liquidity stress tests covering both asset and funding liquidity risk, enabling the UCITS to assess and monitor the liquidity risk accordingly?
Section VIII: Credit risk information

Section scope: UCITS within the reporting scope unless otherwise specified in sub-section scope.

Section content: Credit risk information of the UCITS.

A. Debt portfolio credit quality

Sub-section scope: This sub-section is only applicable to UCITS within the reporting scope which have a total debt portfolio exposure, by means of securities investments (direct exposure) or financial derivative instruments investments (indirect exposure), at semester-end greater than or equal to 50% of the UCITS total net assets.

Sub-section content: Percentage of the total net assets of the UCITS exposed to debt securities broken down by credit rating from 1 to 10 with reference to an internal assessment of the credit quality of the said instruments, whereby rating 1 is deemed to be the upper credit rating (i.e. the highest quality) and 10 relates to defaulted securities. While the scale refers to rating from 1 to 10, as also commonly done by recognized external credit rating agencies, the CSSF expects in accordance with the current regulation, management companies/investment companies not to rely mechanistically to external rating agencies for assessing the credit quality of their portfolios.

Debt securities are to be viewed in a broad sense, i.e. all bonds and other forms of securitized debt (e.g. convertible bonds, ABS/MBS, etc.), money market instruments as well as financial derivative instruments relating to the foresaid debt securities.

For instance, financial derivative instruments relating to government bonds (e.g. bond future contracts like the 10 year Bund Future contract) should be included in this context. However, financial derivative instruments relating to interest rates (e.g. interest rate swaps like fixed / floater IRS, short term interest rate futures like 3-month Euribor future) are not to be considered as there is no issuer risk exposure.

Furthermore, financial derivative instruments should be taken into account on the basis of the value of the equivalent position in the underlying debt securities (as opposed to a mark to market valuation of the derivative contract).

Financial derivative instruments the underlying of which is a financial index (e.g. iTraxx CDS) or shares of collective investment scheme held that invest in debt securities may be excluded.

For the purpose of this section UCITS can benefit from possible netting effects provided that they comply with the provisions of section IV.4. “Limitation of concentration risk” of CSSF circular 11/512.

- % exposed to debt securities with rating = 1
- % exposed to debt securities with rating = 2
- % exposed to debt securities with rating = 3
- % exposed to debt securities with rating = 4
- % exposed to debt securities with rating = 5
- % exposed to debt securities with rating = 6
- % exposed to debt securities with rating = 7
- % exposed to debt securities with rating = 8
% exposed to debt securities with rating = 9
% exposed to debt securities with rating = 10

Examples:

1) The UCITS invests in the following debt securities and financial derivative instruments:

- the 10Y German Bund bond with a market value of +10
- 5 short contracts of 10Y Bund future with the market value of the equivalent position in the underlying bonds of -30

Assume the UCITS TNA at the semester end is 100 and that the bund credit rating is 1, the "% exposed to debt securities with rating = 1" bucket is thus equal to +20% as the result of the netting between both positions.

2) The UCITS invests in the following securities and instruments:

- a 10Y bond issued by an US corporate with a market value of +10
- 5 short contracts of 10Y Bund future with the market value of the equivalent position in the underlying bonds of -30

Assume the UCITS TNA at the semester end is 100, the bund credit rating is 1 and the US corporate rating is 1, the "% exposed to debt securities with rating = 1" bucket is thus equal to +40% as netting is not allowed in those circumstances.

B. Debt portfolio credit spreads

Sub-section scope: This sub-section is only applicable to UCITS within the reporting scope which have a total debt portfolio exposure, by means of securities investments (direct exposure) or financial derivative instruments investments (indirect exposure), at semester-end greater or equal to 50% of the UCITS total net assets.

Sub-section content: Percentage of the total net assets of the UCITS exposed to debt securities within given credit spread buckets.

Explanations and details given in the previous sub-section VIII.A do apply strictly in the same way.

- % exposed to debt securities with credit spread < 100 bps
- % exposed to debt securities with credit spread between 100 and 350 bps
- % exposed to debt securities with credit spread between 350 and 1000 bps
- % exposed to debt securities with credit spread ≥ 1000 bps.

C. Credit linked instruments

Sub-section content: Percentage of the total net assets of the UCITS invested at semester-end in the following instruments:

- Convertible bond
- Contingent convertible “CoCo” bond
- ABS/MBS
- Other structured products
Under “other structured products” UCITS should for instance classify exposure to certificates or structured notes.

N.B: This list completes information already available at the level of the CSSF from other data sources (cf. BcL reporting).
## Sheet “Contact details”

**Section scope:** All management companies and self-managed investment companies (irrespective of the total net assets and average level of leverage of the UCITS they manage).

**Section content:** Contact details at the level of the management company or self-managed investment company in order to enable the CSSF, amongst others, to send the circular letter for UCITS risk reporting by e-mail (in addition to the posted letter) to all addressees.

To that end, the contact details of the following persons should be provided:

- the Conducting Officers in charge of the following functions:
  - Risk Management
  - Compliance
  - Internal Audit
  - Investment Management
  - Administration
  - Marketing
- the AML/CFT compliance officer (as required by CSSF Regulation 12-02)
- the URR contact person(s).

The contact details consist in the following information:

- **First name and Last name**
- **E-mail address**
  
  Please note that generic e-mail addresses may be provided, as long as a prompt delivery to the concerned officer(s) is guaranteed.
- **Phone number**
  
  The phone number should include the prefix for telephone numbers outside Luxembourg.

Where multiple names, e-mail addresses or phone numbers are provided in a single cell, these should be separated by a semicolon (;).