Guidelines

On the reporting to competent authorities under Article 37 of the MMF

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I. Scope

Who?

1. These guidelines apply to competent authorities and MMFs and managers of MMFs within the meaning of the MMF Regulation.

What?

2. These guidelines apply in relation to Article 37 of the MMF Regulation and the reporting template in the Annex of the Implementing Regulation on reporting.

When?

3. These guidelines apply from two months after the date of publication of the guidelines on ESMA's website in all EU official languages.

II. Legislative references, abbreviations and definitions

Legislative references

ESMA Regulation	Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC[1]
MMF Regulation	Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds[2]
Implementing Regulation on reporting	Commission Implementing Regulation (EU) 2018/708 of 17 April 2018 laying down implementing technical standards with regard to the template to be used by managers of money market funds when reporting to competent authorities as stipulated by Article 37 of Regulation (EU) 2017/1131 of the European Parliament and of the Council[3]

Abbreviations

ESMA	European Securities and Markets Authority
EU	European Union
MMF	Money Market Fund

[1] OJ L 331, 15.12.2010, p. 84.
[2] OJ L 169, 30.6.2017, p. 8.
[3] OJ L 119, 15.5.2018, p. 5.

III. Purpose

4. These guidelines are based on Article 16(1) of the ESMA Regulation. The objectives of these guidelines are to establish consistent, efficient and effective supervisory practices and to ensure the common, uniform and consistent application of Article 37 of the MMF Regulation and the Implementing Regulation on reporting. In particular, they aim to provide guidance on the contents of the fields of the reporting template included in the Annex of the Implementing Regulation on reporting.

IV. Compliance and reporting obligations

4.1 Status of the guidelines

5. In accordance with Article 16(3) of the ESMA Regulation, competent authorities and financial market participants must make every effort to comply with these guidelines. Competent authorities to which these guidelines apply should comply by incorporating them into their national legal and/or supervisory frameworks as appropriate, including where particular guidelines are directed primarily at financial market participants. In this case, competent authorities should ensure through their supervision that financial market participants comply with the guidelines.

4.2 Reporting requirements (specific to competent authorities)

6. Within two months of the date of publication of the guidelines on ESMA's website in all EU official languages, competent authorities to which these guidelines apply must notify ESMA whether they (i) comply, (ii) do not comply, but intend to comply, or (iii) do not comply and do not intend to comply with the guidelines. In case of non-compliance, competent authorities must also notify ESMA within two months of the date of publication of the guidelines on ESMA's website in all EU official languages of their reasons for not complying with the guidelines. A template for notifications is available on ESMA's website. Once the template has been filled in, it shall be transmitted to ESMA.

V. Specifications on the reporting template under Article 37 of the MMF Regulation

5.1 General principles

7. This section includes general principles that apply to the entire MMF reporting. It provides further guidance on reporting and reporting periods as well as the procedure for the first report.

5.1.1 Reporting and submission periods

8. The reporting periods are aligned with the Trans-European Automated Real-time gross settlement (TARGET).

9. Express Transfer (TARGET) calendar and reporting periods should end on the last day of March, June, September and December of each year. This means that MMFs subject to yearly reporting obligations should report once a year as of the last day of December. MMFs subject to quarterly reporting obligations should report on a quarterly basis as of the last day of March, June, September and December.

10. If the last day of a reporting period in a jurisdiction of a reporting MMF is a bank holiday and no data is available for that date, the MMF should use information from the immediately last previous day when the information is available, but the reporting date should remain the last day of the reporting period according to the TARGET calendar. In all these cases, managers of MMF could send the report to the competent authority of the MMF until 30 days after the end of the corresponding quarter/year.

5.1.2 Procedure for first reporting

11. There may be cases in which managers of MMFs do not have any information to report on MMFs. In such a scenario, managers of MMFs should still provide a report to their NCAs by indicating that no information is available by using a specific field.

12. The first reporting should cover the period from the authorization date of the MMF (exact date) until the end of the reporting period.

13. Managers of MMFs should report information to their national competent authorities only once per reporting period covering all the reporting period. For example, managers of MMFs subject to yearly reporting obligations should only provide one report to their NCAs for each year period (yearly period that always end on 31 December of that specific year). Managers of MMFs subject to quarterly reporting obligations should only provide one report to their NCAs for each quarterly period.

5.1.3 Procedures when managers of MMFs are subject to new reporting frequency or changes to their reporting

14.With respect to the thresholds referred to in Article 37(1) of the MMF Regulation, the total value of assets under management is considered for the purpose of the reporting template to equal the NAV, as per field A.4 (A.4.1 and A.4.2). Furthermore, the NAV should be measured when the corresponding data is made available on a quarterly basis (last day of the quarter).

15.According to Article 37(1) of the MMF Regulation, for an MMF whose assets under management (equal NAV, as per the previous paragraph) in total do not exceed EUR 100 000 000, the manager of the MMF shall report to the competent authority of the MMF on at least an annual basis. In that case, the manager of the MMF is however also allowed to report on a quarterly basis.

16.In order to determine their reporting obligation, managers of MMF need to check quarterly the NAV of the MMF on the last day of each three first quarters:

(i) If at the end of the considered quarter the NAV of the MMF is below the EUR 100 000 000threshold, the manager has no obligation to report;

(ii) If at the end of the considered quarter the NAV of the MMF is above or equals the EUR 100 000 000threshold, the manager has the obligation to provide a report for the period covering all the last non-reported quarters;

(iii) The manager has the obligation to report at the end of the year for the period covering all the last non-reported quarters.

Together with the reporting year, the manager of the MMF should report the reporting period for which the reporting template is submitted. The reporting period is defined by the quarter from which the reporting period starts and by the quarter to which the reporting period ends. These principles are implemented according to the various possibilities as described in the following table:

	NAV end of quarter 100 000 000EUR threshold test			
	Q1	Q2	Q3	Q4
Scenario 1	*above*	*above*	*above*	*above/below*
Reporting obligation	from Q1 to Q1	from Q2 to Q2	from Q3 to Q3	from Q4 to Q4
Scenario 2	*above*	*above*	*below*	*above/below*
Reporting obligation	from Q1 to Q1	from Q2 to Q2	from Q3 to Q4	
Scenario 3	*above*	*below*	*above*	*above/below*
Reporting obligation	from Q1 to Q1	from Q2 to Q3		from Q4 to Q4

Scenario 4	*above*	*below*	*below*	*above/below*
Reporting obligation	from Q1 to Q1	from Q2 to Q4		
Scenario 5	*below*	*above*	*above*	*above/below*
Reporting obligation	from Q1 to Q2		from Q3 to Q3	from Q4 to Q4
Scenario 6	*below*	*above*	*below*	*above/below*
Reporting obligation	from Q1 to Q2		from Q3 to Q4	
Scenario 7	*below*	*below*	*above*	*above/below*
Reporting obligation	from Q1 to Q3			from Q4 to Q4
Scenario 8	*below*	*below*	*below*	*above/below*
Reporting obligation	From Q1 to Q4			

5.1.4 ECB exchange rate (referred to in fields A.4.1, A.6.12, A.6.16, A.6.30, A.6.34, A.6.52, A.6.54, A.6.56, A.6.67, A.6.70, A.6.80, A.6.91, A.6.93, A.6.97, B.1.11, B.1.13)

17. Fields A.4.1, A.6.12, A.6.16, A.6.30, A.6.34, A.6.52, A.6.54, A.6.56, A.6.67, A.6.70, A.6.80, A.6.91, A.6.93, A.6.97, B.1.11, and B.1.13 of the Implementing Regulation on reporting specify that if the base currency is not EUR the exchange ratio to be used shall be the ECB one (at the end of the quarter).

18. Euro foreign exchange reference rates are quoted by the ECB as base currency against euro (e.g. expressed as 1 EUR = 129.04 JPY as of 29 June 2018). Thus, the value in the fields in base currency should be divided by this rate. For example, if, as of end of Q2 2018 (last business day 29 June 2018), the NAV of the fund is expressed in JPY and worth 150 billion of Japanese yen (value reported in field A.4.2), the value to report in field A.4.1 would be 150 billion / 129.04 = 1.162 billion of EUR (rounded here at 10^{-3}).

5.1. 5 Optional vs mandatory fields

19. Information marked as
    a. **mandatory should be reported by all managers of MMFs.**

    b. **optional should be reported by the manager of the MMF, except if this regulatory information does not apply to this specific MMF at this specific point of time.**

    c. **conditional is linked to other information (flags) in the reporting template. If those flags are answered with "Yes", the corresponding conditional information has to be reported. However, if those flags are answered with "No", the corresponding conditional information should not be reported**.

5.1. 6 Comment on a reported element

20. In the context of the MMF database is defined a drop down list of the fields for which the manager of the MMF is allowed to provide any useful comment. This list will be

included in IT template to be filled in by managers. Managers should use this drop down list of fields to include these comments.

5.1. 7 Meaning of the format "%" (fields A.4.5, A.4.6, A.4.7, A.4.8, A.4.9, A.4.10, A.5.1 to A.5.9, A.7.1, A.7.2, A.7.3, A.7.4, A.7.7), and use of the figure "0" in filling the reporting template

21. With respect to the different fields (fields A.4.7, A.7.2, A.7.3, A.7.4) where percentages need to be reported that sum up to 100%, managers should ensure that the sum of the reported percentages (where relevant) equals 100%. Percentages should be reported as numbers between 0 and 100. For example, 53% should be reported as 53 (and not 0.53). This is also true for field A.4.7 which does not include the term "%" in the column "reported data" of the Implementing Regulation on reporting.

22. Competent authorities should reject any report where the sum of reported percentages (where relevant) does not equal 100%.

23. In addition, when a manager of a MMF uses the figure "0" to fill in one of the fields of the MMF reporting template, this should only mean the value of the figure (0) and nothing else (such as "non-submission", "not relevant", or "does not apply" or "no information is available").

5.2 Blocks (collection of fields)

24. This section includes specifications in relation to each block of fields of the reporting template and addresses the relevant fields in relation to a particular topic, with accompanying guidance on how to populate them. The blocks are structured to be independent of each other.

Block 1 – MMF characteristics

5.2.1 Member State where the MMF is authorised (field A.1.9)

25. Field A.1.9 relates to a singular form ("Member State") whereas field A.1.10 relates to a plural form ("Member States"). The singular form reflects the case of an EU MMF but not the case of a non-EU MMF for which the same MMF may have several competent authorities (for example, a non-EU AIF MMF marketed in the EU in several Member States without a passport, cf. article 2(17)(c)(i) of the MMF Regulation). The Member State to be reported in that case under field A.1.9 is the Member State of the competent authority to which the report is submitted.

26. With respect to the Member State where the MMF is authorised (field. A.1.9), in the specific case of a non-EU MMF for which there could be several such competent authorities, all these several Member States should be reported under field A.1.9. It is to be noted that the same information on a specific MMF reported to different national competent authorities should be identical.

5.2.2 Member States where the MMF is marketed (field A.1.10)

27. With respect to the Member States where the MMF is marketed (field. A.1.10), all the concerned Member States should be reported under field A.1.10. (where applicable) and in the specific case of a MMF which is not marketed in any Member State, it should be indicated "Non-European".

5.2.3 Inception date (field A.1.11)

28. The inception date of an MMF as referred to in field A.1.11 is the date when the first NAV of the MMF is calculated. If the MMF was a pre-existing fund which has been granted the MMF authorisation under the MMF Regulation, this inception date should be the date when the first NAV of this fund as a MMF (under the MMF Regulation) is calculated.

5.2.4 Base currency of the MMF (field A.1.12)

29. The base currency of the MMF reported in field A.1.12 should be the same as indicated in the prospectus of the MMF. If an MMF is composed of different share classes that differ in relation to their base currency, the base currency that should be included in

field A.1.12 is the base currency as specified in the reference accounting documents of the MMF.

30. In addition, with respect to the base currency of the MMF (field A.1.12), for the particular case of currencies with several codes (e.g. onshore/offshore currencies such as Chinese renminbi with CNY/CNH), it should be noted that the instruments are to be reported with a single currency code (onshore one, here CNY - codes in the official ISO list) and to be converted into EUR at the applicable rate (e.g. instruments denominated in CNH to be reported with the CNY currency code and converted into EUR at the applicable EUR/CNY rate).

31. Finally, if the base currency of the MMF is Euro, the fields A.4.2, A.6.13, A.6.15, A.6.17, A.6.31, A.6.33, A.6.35, A.6.53, A.6.55, A.6.57, A.6.68, A.6.71, A.6.81, A.6.92, A.6.94, A.6.98, B.1.12, and B.1.14 should not be filled in.

5.2.5 Feeder MMFs for MMF marketed solely through employee savings scheme (fields A.3.1 to A.3.4)

32. Managers of MMF should treat feeder MMFs of the same master fund individually. They should not aggregate all the information on feeder MMFs of the same master(s) in a single report. (i.e. one report gathering all the information on feeder MMFs and their master MMF(s)).

33. When reporting information on feeder MMFs, managers of MMFs should identify the master MMF in which each feeder invests but should not look through the master MMF(s) to its(their) holdings. If applicable, managers of MMFs should also report detailed information on investments that are made at feeder MMF level, such as investments in financial derivative instruments.

34. In addition, in relation to field A.3.1 - If the MMF complies with the requirements of Article 16(5) of the MMF Regulation, indicate whether the MMF is a master or a feeder fund [Select one] – a NONE value should be added when the fund is not a feeder or a master. This will be added in the reporting template managers of MMF will have to fill in.

5.2.6 Share classes (fields A.3.5 to A.3.7)

35. With respect to MMF with different share classes denominated in different currencies (field A.3.7), the manager of the MMF should report all different currencies of the different share classes, indicating which currency is related to which share class.

36. In addition, with respect to the ISIN of the different share classes (field A.3.6), given the interaction with field A.7.5, managers of MMF should identify which share or unit class of the MMF is the largest within the list mentioned under field A.3.6.

5.2.7 Merge of an MMF (field A.3.8)

37. Managers of merged MMFs should provide the last report of the MMF to their NCA not later than 30 days after the end of the quarter in which the MMF has been merged.

5.2.8 Liquidation of an MMF (field A.3.9)

38. Liquidation processes may vary according to the type of MMFs managed and the jurisdiction of the MMF. Depending on the situations, the last report might not contain any information (where all the positions of the MMF have been unwound), or else the report might be complete. Indeed, in some cases, an MMF that enters into a liquidation procedure (administrative procedure) is no longer managed by the manager and the liquidation is instead carried out by a liquidator. In that case, the manager of the MMF should provide a report to the NCAs of the MMF for the MMF before the liquidator takes over the responsibility for the liquidation of the MMF.

39. Managers of MMFs should submit the last MMF report not later than 30 days after the end of the quarter in which the MMF has been liquidated or put into liquidation.

5.2.9 Change of the manager of an MMF

40. When the manager of an MMF changes between two reporting dates, the former manager of the MMF should not report any information at the end of the reporting period. Rather, the information should be reported by the new manager of the MMF at the end of the reporting period covering the whole period based on information provided by the former manager of the MMF.

5.2.10 Withdrawal of the authorization of an MMF

41. Managers of MMFs should submit the last MMF report not later than 30 days after the end of the quarter in which the MMF has been withdrawn its authorization.

5.2.11 Granting of the authorisation of an MMF due to a change of strategy of an existing non-MMF fund

42. When the manager of a fund is granted the authorization of an MMF under the MMF Regulation for the purpose of that specific fund, due to a change of its strategy, the information should be reported starting from the date the fund get its MMF authorisation by the manager of this new MMF at the end of the reporting period covering that whole period.

5.2.12 Umbrella MMFs

43. If an MMF takes the form of an umbrella AIF with several compartments, MMF-specific information should be reported at the level of the compartments.

44. The reporting frequency of an MMF is not affected by the legal structure of the MMF. Each MMF, being compartments of the same umbrella MMFs or not, has to be treated separately for the purpose of the reporting obligations (including for the reporting frequency).

Block 2 – Portfolio indicators

5.2.13 Portfolio liquidity profile (field A.4.7)

45. Managers of MMFs should report the percentage of the fund's portfolio that is capable of being liquidated under normal market conditions within each of the liquidity periods specified. The total should equal 100%.

46. If individual positions are important contingent parts of the same trade, managers of MMFs should group all of these positions under the liquidity period of the least liquid part.

47. Managers of MMFs should adopt a conservative approach when they report information on the portfolio liquidity. Managers of MMFs should take into account the time delay for having the proceeds of the sale available on a cash account if it has as a non-negligible impact on the liquidity profile of the MMF.

5.2.14 Cumulative returns (field A.4.8)

48. With respect to field A.4.8 of the Implementing Regulation on reporting, the figure of cumulative returns to be reported should be net returns. The manager of an MMF shall report the cumulative returns of the most representative share class, as defined under field A.4.9. The basis for defining the range of cumulative returns to be reported should be the reporting end date.

5.2.15 Performance of the most representative share class (field A.4.9)

49. According to the field A.4.9 of the Implementing Regulation on reporting, the manager of an MMF shall report the calendar year performance of the most representative share class. The basis for defining the range is the calendar year. That means that the same value should be reported for all the quarters of the year for N-1, N-2 and N-3.

50. With respect to field A.4.9 of the Implementing Regulation on reporting on the calendar year performance of the most representative share class**, the most representative share class should be understood as the share class associated with the highest NAV proportion at the end of the reporting period unless specific circumstances warrant to select another share class.** In addition, no data should be reported when the inception date of the MMF was less than 12 months before the reporting end date.

5.2.16 Monthly portfolio volatility and Monthly portfolio volatility of the shadow NAV (when applicable) (field A.4.10)

51. First with respect to (field A.4.10)), the shadow NAV should be understood as the "NAV per unit or share in accordance with Article 30" as referred to in articles 31(4) and 32(4) of the MMF Regulation. The reporting of the monthly portfolio volatility of the shadow NAV is not relevant for VNAV MMFs, the managers of which should only report the monthly volatility of the NAV per unit or share. The managers of CNAV/LVNAV MMF should only report the monthly portfolio volatility of the shadow NAV of the CNAV/LVNAV MMF.

52. In addition, with respect to monthly portfolio volatility and monthly portfolio volatility of the shadow NAV, the following specifications should also be applied:

The following formula of the monthly volatility, which is expressed on an annualized basis, should be used:

$$\sigma_f = \sqrt{\frac{m}{T-1}\sum_{t=1}^{T}(r_t - \bar{r})^2}$$

Where:

For VNAV, the returns of the fund (rt) are monthly returns of the NAV per unit or share calculated over the T last periods (not considering subscription and redemption fees). For CNAV and LVNAV, (rt) are monthly returns of the shadow NAV per unit or share.

m = 12

Depending on the range, T=12 for the 1 year range, T = 24 for the two years range and T=36 for the three years range

$\bar{r}$ is the arithmetic mean of the monthly return rates, as applicable, of the fund over T periods according to the following formula:

$$\bar{r} = \frac{1}{T}\sum_{t=1}^{T} r_t$$

In the cases where the available data on returns are not sufficient to cover a given range, the manager shall not report any data for this range (e.g. a fund that exists since 18 months only should not report the 2 years nor the 3 years monthly portfolio volatility).

Block 3 – Stress tests

5.2.17 Results of stress tests (fields A.5.1 to A.5.10)

53. Apart from field A.5.10 on the proposed action plan in relation to stress tests, where free text is allowed, the rest of the information to be reported should consist of figures, predetermined values or names. For field A.5.10, ESMA recommends that the national competent authority allow managers of MMFs to report the information in English, which would allow multinational groups to centralise and harmonise their MMF reporting.

54. In addition, with respect to fields A.5.1 to A.5.10, managers of MMFs should fill in these fields quarterly (even within the quarters when no stress tests have been carried) and indicate the date when the stress tests the results of which they report was carried. One of these dates should be the last day of Q2 and another one should be the last day of the year. When several stress tests were performed during the reporting period, only the last one should be reported.

55. The format of the results of the stress tests to be reported in fields A.5.1 to A.5.10 are further specified in the ESMA Guidelines on stress tests scenarios under the MMF Regulation[4].

Instructions to fill the template

56. MMF managers should report the results of the stress tests according to the scenarios displayed in Annex 2 of these guidelines – Table 1 and then report the corresponding values. Table 1 in Annex 2 sets out all the different stress test scenarios defined in the ESMA Guidelines on stress tests scenarios under the MMF Regulation and provides clarification on the scope of information to be provided. This mechanism is based on the assumption that the reporting template for reporting the results of the stress tests needs to cover the stress test scenarios established in the ESMA Guidelines on stress tests scenarios that will be reviewed on a yearly basis in order to take into account the latest market development. Where ESMA Guidelines on stress tests scenarios are updated with new stress test scenario, one new scenario code should be added in that table indicating which elements have to be reported.

57. Unless otherwise specified, managers should report positive values.

58. Some examples of the above are described below:

[4] https://www.esma.europa.eu/sites/default/files/library/esma34-49-164_guidelines_mmf_stress_tests_draft_final_report.pdf

- Case LST-01 on the impact in relation with the hypothetical changes in the level of liquidity of the assets held in the portfolio of the MMF

With respect to the hypothetical changes in the level of liquidity of the assets held in the portfolio of the MMF, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case CST-01 on the impact in relation with the hypothetical changes in the level of credit risk of the assets held in the portfolio of the MMF based on credit spread stress test

With respect to the hypothetical changes in the level of credit risk of the assets held in the portfolio of the MMF, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case CST-02 on the impact in relation with the hypothetical changes in the level of credit risk of the assets held in the portfolio of the MMF based on concentration stress test

With respect to the hypothetical changes in the level of credit risk of the assets held in the portfolio of the MMF, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case FST-01 on the impact in relation with the change of the exchange rates based on the scenario "appreciation of the EUR against the USD"

With respect to the levels of change of the exchange rates for the appreciation of the EUR against the USD scenario, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case FST-02 on the impact in relation with the change of the exchange rates based on the scenario "depreciation of the EUR against the USD"

With respect to the levels of change of the exchange rates for the depreciation of the EUR against the USD scenario, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case IST-01 on the impact in relation with the hypothetical changes of the interest rates

  With respect to the levels of change of the interest rates, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case SST-01 on the impact in relation with the hypothetical changes on the levels of widening or narrowing of spreads among indices to which interest rates of portfolio securities are tied

  With respect to the levels of widening or narrowing of spreads among indices, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case RST-01 on the impact in relation with the hypothetical levels of redemption measured as the computation of the reverse liquidity stress test

With respect to the reverse liquidity stress test, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case RST-02 on the impact in relation with the hypothetical levels of redemption measured as the computation of the weekly liquidity stress test

With respect to the weekly liquidity stress test, the MMF manager should report the result as a percentage indicating the ratio between the weekly outflows (denominator) and the weekly liquid assets (first bucket and total bucket; numerator).

- Case RST-03 on the impact in relation with the hypothetical levels of redemption measured as a concentration stress test

With respect to the concentration stress test, the MMF manager should report the result as a percentage indicating the ratio between the redemptions of its 2 main investors (denominator) and the weekly liquid assets (first bucket and total bucket; numerator).

- Case MST-01 on the impact in relation with the hypothetical macro systemic shocks affecting the economy as a whole measured as the combined impact of all factors on the net asset value

With respect to the combined impact of all factors on the net asset value, the MMF manager should report the impact as a percentage of the reporting NAV.

- Case MST-02 on the impact in relation with the hypothetical macro systemic shocks affecting the economy as a whole measured as the combined impact of all factors on the weekly liquid assets

With respect to the combined impact of all factors on the weekly liquid assets, the MMF manager should report the result as a percentage indicating the ratio between the weekly outflows (denominator) and the weekly liquid assets (first bucket and total bucket; numerator).

In addition, the MMF manager should report the value of weekly outflows computed for the scenario as “the input factor”.

<u>Instructions to measure the impact of the stress test scenarios</u>

Liquidity (LST-01)

59. For each relevant transferable security, the discount factors should be applied to the price used for the valuation of the fund at the time of the reporting ($\mathbf{VPrice}$) as per art 29(3)(a), according to their type and maturity, to derive an adjusted price ($\mathbf{VPrice_{adj}}$):

$$\mathbf{VPrice_{adj}} = (\mathbf{1} - \mathbf{liquidity\ discount}) * \mathbf{VPrice}$$

The manager of the MMF should estimate the impact of the potential losses by valuing the investment portfolio at the derived adjusted price, $\mathbf{VPrice_{adj}}$, to determine the stressed NAV and report the impact as a percentage of the reporting NAV:

$$\mathbf{Asset\ liquidity\ risk\ impact}\ (\%) = \frac{\mathbf{Reporting\ NAV} - \mathbf{Stressed\ NAV}}{\mathbf{Reporting\ NAV}} * \mathbf{100}$$

Example: The following paragraph provides an example of how to evaluate securities to estimate the impact of potential losses due to a deterioration in market liquidity. An MMF manager shall

consider the securities subject to liquidity stress, their rating profile and their remaining maturity. It must be noted that not all assets are subject to stress test.

For each relevant security, the manager should apply the discount factor provided in the guideline in the formula

$$\boldsymbol{Valuation_{adj} = (1 - liquidity\ discount) * Valuation\ price}$$

The following examples apply liquidity discount factors from Guidelines on stress test scenarios of 2019.

- Consider a German sovereign bond, with a valuation price of 1 euro and a remaining maturity below 3 months. Applying the formula above the adjusted valuation price would be:

$$\boldsymbol{Valuation_{adj}} = (1 - 0.6) * 1 = 0.94$$

- Consider a sovereign bond rated with A, with a valuation price of 3 euro and a remaining maturity below 2 years. Applying a liquidity discount factor to its valuation price, its stressed price would be:

$$\boldsymbol{Valuation_{adj}} = (1 - 0.77) * 3 = 0.69$$

- Consider a AA corporate bond with a remaining maturity below 1 year and price of 2 euros. Applying a liquidity discount factor to its valuation price, its stressed price would be:

$$\boldsymbol{Valuation_{adj}} = (1 - 0.49) * 2 = 1.02$$

- Liquidity stress test does not apply to all assets. For instance, a deposit with a value of 1 euro, would have an adjusted valuation price of 1 euro.

A manager should then compute and report the stressed NAV based on the adjusted valuation prices of all securities, after applying the liquidity stress.

Finally, based on the stressed NAV, the manager should calculate and report the asset liquidity risk impact, based on the following formula

$$\textbf{Asset liquidity risk impact } (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}} * \textbf{100}$$

<u>Credit</u>

<u>CST-01</u>

60.For each security, managers of MMFs should apply the increase in spread communicated by ESMA. For each security, managers of MMFs should translate the corresponding change in spread into a haircut. Managers of MMFs should report the impact of the cumulated haircuts in percentage of reporting NAV.

$$\textbf{Credit risk impact } (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}} * \textbf{100}$$

Example:

When the yield-to-maturity of a given debt security is the sum of the credit spread of the issuer and the swap rate for the same currency and maturity:

$Bond$ yield = $CreditSpreadBond$ + Interest Rate$SWAP$

By default, the change in the value of the bond shall be measured as:

$$\%\Delta Price = -DUR \times \frac{\Delta CreditSpreadBond}{1 + Yield}$$

Where %∆Price is the percent change in the price of the security;

DUR is the duration, based on the manager data;

Yield is the yield of the security, based on the manager data;

∆CreditSpreadBond is the shock communicated by ESMA.

Managers of MMFs are expected to:

1) Find the relevant parameter published by ESMA

- For a government bond with a residual maturity of 1 year, the manager should take the corresponding shocks in the scenario table: in this example, we consider that the 1-year shock to credit spread on this bond is +35bp.

2) Find the relevant internal parameter

- In this example the manager finds that the duration is 1 year and the yield is 1%

$$\%\Delta Price = -1 \times \frac{0.0035}{1.01} = -0.35\%$$

3) Measure the Stressed NAV

- In this example the value of the security is 100. The value loss is therefore 0.35.
- The calculation should be repeated for all the securities stressed in the portfolio

- The Stressed NAV is the difference between the reporting NAV and the sum of the value losses:

$$\textbf{Stressed NAV} = \textbf{Reporting NAV} - \boldsymbol{\Sigma}\ \textbf{Value Losses}$$

4) Measure the impact

- The impact to report is

$$\textbf{Credit risk impact}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}}$$

CST-02

61. Managers of MMFs should also simulate the default of their two main exposures. The resulting impact on NAV would then be reported, expressed as a percentage.

$$\textbf{Concentration risk impact}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}} * \mathbf{100}$$

Example:

Managers of MMFs are expected to:

1) Identify their two main exposures

- The exposures referred to in CST-02 refer to the sum of all instruments issued by a single body and, when relevant, deposits made with the same credit institution.

2) Measure the stressed NAV

- The collateral (or any other mitigant, e.g. credit derivatives) received should be considered. If there is no assumption, the manager assesses the value of the collateral.

After considering the effects of collateral, the following loss given default should apply:

- Senior exposures: 45 %;
- Subordinated exposures: 75 %.

- In this example the MMF has a reporting NAV of 100 and 2 senior exposures of 10 and 15:

$$\textbf{Stressed NAV} = \textbf{Reporting NAV} - (\mathbf{10} * \mathbf{45}\% + \mathbf{15} * \mathbf{45}\%)$$
$$\textbf{Stressed NAV} = \mathbf{100} - \mathbf{11.25} = \mathbf{88.75}$$

5) Measure the impact

- The impact to report is:

$$\textbf{Concentration risk impact}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}}$$

Exchange rates (FST-01; FST-02)

62. Managers of MMFs should use the parameters published by ESMA: FX shocks which corresponds to movements of the exchange rates. Managers of MMFs should revaluate their portfolio taking into account the new parameters and express the impact of each risk factor as a percentage of reporting NAV. A “zero” in the reporting template should only be reported if a scenario has no impact.

Example:

For each scenario, managers of MMFs are expected to:

1) Find the relevant parameter published by ESMA

- The table gives the relative change of selected currencies.
- A positive (negative) sign of the EUR/USD means an appreciation (depreciation) of the EUR against the USD.

2) Measure the change in price

- In this example the manager is holding a USD-denominated security with a value of 100.
- The shock to EURUSD is +25%, therefore the change in the price of the USD-denominated security is

$$\Delta Price = \ 100 - \frac{100}{1.25} = \ -20$$

Where ∆Price is the change in the price of the security

- The manager should consider all existing hedging, based on the manager data. If there is no assumption, the manager assesses the efficiency of the hedging.
- The calculation should be repeated for all the securities stressed in the portfolio.

3) Measure the Stressed NAV

- The Stressed NAV is the difference between the reporting NAV and the sum of the value changes (losses and gain):

$$\textbf{Stressed NAV} = \ \textbf{Reporting NAV} + - \boldsymbol{\Sigma}\ \textbf{Value changes}$$

4) Measure the impact

- The impact to report is:

$$\textbf{FX risk impact}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}}$$

<u>Interest rates (IST-01)</u>

63. Managers of MMFs should use the parameters published by ESMA: Interest rate yield shocks which corresponds to movements of the interest rates. Managers of MMFs should revaluate their portfolio taking into account the new parameters and express the impact of each risk factor as a percentage of reporting NAV. A "zero" in the reporting template should only be reported if a scenario has no impact.

Example:

When the yield-to-maturity of a given debt security is the sum of the credit spread of the issuer and the swap rate for the same currency and maturity:

$$Bond \text{ yield} = CreditSpreadBond + \text{Interest Rate}SWAP$$

By default, the change in the value of the bond shall be measured as:

$$\%\Delta Price = -DUR \times \frac{\Delta Interest\ Rate\ \text{SWAP}}{1 + Yield}$$

Where %ΔPrice is the percent change in the price of the security;

DUR is the duration, based on the manager data;

Yield is the yield of the security, based on the manager data;

ΔInterest Rate SWAP is the shock communicated by ESMA.

Managers of MMFs are expected to:

1) Find the relevant parameter published by ESMA

- For a Euro-denominated bond with a residual maturity of 1 year, the manager should take the corresponding shocks in the scenario table: in this example, we consider that the 1-year shock to interest rate yield on the EUR is +80bp.

2) Find the relevant internal parameter

- In this example the manager finds that the duration is 1 year and the yield is 1%

$$\%\Delta Price = \ -1 \times \frac{0.008}{1.01} = \ -0.79\%$$

3) Measure the Stressed NAV

- In this example the value of the security is 100. The value loss is therefore 0.79.
- The calculation should be repeated for all the securities stressed in the portfolio
- The Stressed NAV is the difference between the reporting NAV and the sum of the value losses:

$$\textbf{Stressed NAV} = \ \textbf{Reporting NAV} - \ \boldsymbol{\Sigma}\,\textbf{Value Losses}$$

4) Measure the impact

- The impact to report is

$$\textbf{Interest rate risk impact}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}}$$

<u>Spread among indices (SST-01)</u>

64. Managers of MMFs should use the parameters published by ESMA: Interest rate yield shocks which corresponds to movements of the interest rates. Managers of MMFs should revaluate their portfolio taking into account the new parameters and express the impact of each risk factor as a percentage of reporting NAV. If the scenarios of a change of the interest rates and a widening or narrowing of spreads among indices to which interest rates of portfolio securities are tied have the same impact, managers of MMFs shall only report the result once under (IST-01). A “zero” in the reporting template should only be reported if a scenario has no impact.

Example:

See IST-01

Level of redemption

<u>RST-01</u>

65. The reverse liquidity stress test takes the following steps:

- For each asset, managers of MMFs are required to measure the weekly tradable amount (including maturing assets).
- Managers of MMFs are required to measure the maximum weekly tradable amount that can be liquidated with the portfolio allocation still being in line with all regulatory requirements (see examples below) of the MMF ("without distorting the portfolio allocation").
- The result is reported in % of the NAV.

$$\textbf{Result}\ (\%) = \frac{\begin{array}{c}\textbf{Maximum weekly tradable amount}\\ \textbf{that can be liquidated}\\ \textbf{without distorting the portfolio allocation}\end{array}}{\textbf{NAV}} * \mathbf{100}$$

Example:

Managers of MMFs are expected to:

1) Measure the weekly tradable amount

- Managers of MMFs identify the share of the fund's portfolio that is capable of being liquidated within one week. Such assignment should be based on the shortest period during which such a position could reasonably be liquidated at or near its carrying value[5].

2) Assess the Maximum weekly tradable amount that can be liquidated without distorting the portfolio allocation

- The maximum size of outflows the fund can face in one week without distorting the portfolio allocation is determined by (1) the sum of the weekly tradable amounts; and (2) the fund's capacity to comply with the regulatory requirements.
- For these purposes, the regulatory requirements are not limited to but should include at least:
  - Diversification (Article 17 of the MMF Regulation);
  - Concentration (Article 18 of the MMF Regulation);
  - Portfolio rules for short-term MMFs (Article 24 of the MMF Regulation) and for standard MMFs (Article 25 of the MMF Regulation), in particular, Maximum weighted average maturity (WAM); Maximum weighted average life (WAL), daily maturing assets; and weekly maturing assets.
- For example, if 50% of a LVNAV MMF assets are tradable within a week but its WAM becomes higher than 60 days after selling 30%, the manager should report 30%.

3) Measure the impact

- The result to report is

[5] Guidelines on reporting obligations under Articles 3(3)(d) and 24(1), (2) and (4) of the AIFMD

$$\textbf{Result}\ (\%) = \frac{\textbf{Maximum weekly tradable amount that can be liquidated without distorting the portfolio allocation}}{\textbf{NAV}}$$

RST-02

66.Managers of MMFs should apply the following stressed redemption scenario:

- The fund receives net weekly redemption requests from 25% of the professional investors and 15% of the retail investors.
- The fund manager measures available weekly liquid assets to meet the redemption request according to the following table:

Assets	Article	CQS
Assets referred to in Article 17(7)[6] which are highly liquid and can be redeemed and settled within one working day and have a residual maturity of up to 190 days.	24 (e)	1
Cash which is able to be withdrawn by giving prior notice of five working days without penalty.	24 (e) 25 (d)	
Weekly maturing assets	24 (e) 25 (d)	
Reverse repurchase agreements which are able to be terminated by giving prior notice of five working days	24 (e) 25 (d)	
x100% = Weekly liquid assets (bucket 1)		
Assets referred to in Article 17(7) which can be redeemed and settled within one working week.	17(7)	1,2
Money market instruments or units or shares of other MMFs which they are able to be redeemed and settled within five working days.	24 (e) 25 (e)	1,2
Eligible securitisations and asset-backed commercial paper (ABCPs).	9(1)(b)	1
x85% = Weekly liquid assets (bucket 2)		

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[6] *Money market instruments issued or guaranteed separately or jointly by the Union, the national, regional and local administrations of the Member States or their central banks, the European Central Bank, the European Investment Bank, the European Investment Fund, the European Stability Mechanism, the European Financial Stability Facility, a central authority or central bank of a third country, the International Monetary Fund, the International Bank for Reconstruction and Development, the Council of Europe Development Bank, the European Bank for Reconstruction and Development, the Bank for International Settlements, or any other relevant international financial institution or organisation to which one or more Member States belong.*

The result is reported as the coverage of outflows by weekly liquid assets, in %.

$$\textbf{Result}\ (\%) = \frac{\textbf{Weekly liquid assets}}{\textbf{Weekly outflows}} * \textbf{100}$$

Example:

Managers of MMFs are expected to:

1) Measure weekly outflows

- The fund receives net weekly redemption requests from 25% of the professional investors and 15% of the retail investors.

- If half of the portfolio is held by professional investors and half of the portfolio is held by retail investors, total outflows are equal to: 50%* 25% + 50%* 15% = 20%

2) Classify assets in bucket 1 and bucket 2:

Assets	**Holdings**	**CQS1**	**Maturing <5 days**	**CQS2**	**Bucket 1**	**Bucket 2**
Assets referred to in Article 17(7)[7] which are highly liquid and can be redeemed and settled within one working day and have a residual maturity of up to 190 days.	15	8	1	2	9	1.7

- Assets: description of the asset;

[7] *Money market instruments issued or guaranteed separately or jointly by the Union, the national, regional and local administrations of the Member States or their central banks, the European Central Bank, the European Investment Bank, the European Investment Fund, the European Stability Mechanism, the European Financial Stability Facility, a central authority or central bank of a third country, the International Monetary Fund, the International Bank for Reconstruction and Development, the Council of Europe Development Bank, the European Bank for Reconstruction and Development, the Bank for International Settlements, or any other relevant international financial institution or organisation to which one or more Member States belong.*

- Holdings: the fund holds 15% of its portfolio in "Assets referred to in Article 17(7) which are highly liquid and can be redeemed and settled within one working day and have a residual maturity of up to 190 days", for example sovereign bonds;
- CQS 1: financial instruments rated CQS 1 represent 8% of the fund portfolio;
- Maturing <5 days: 7% of the portfolio is rated below CQS 1 (15-8), of which 1% of the portfolio matures within 5 days;
- CQS 2: financial instruments rated CQS 2 (and maturing>5 days) represent 2% of the fund portfolio;
- Bucket 1: financial instruments rated CQS 1 (8%) and financial instruments maturing within 5 days (1%) are included in the bucket 1 of weekly liquid assets (8%+1%=9%);
- Bucket 2: financial instruments rated CQS 2 (2%) are included in the bucket 2 of weekly liquid assets, with a weight of 85% (2%*85%=1.7%)

3) Measure bucket 1 and bucket 2

- Bucket 1 is the sum of all assets classified in bucket 1.
- Bucket 2 is 85% of the sum of all assets not eligible in bucket 1 but classified in bucket 2.
- Each asset can only be accounted once.

4) Report the result:

- Managers of MMF have to report 2 results:

$$\textbf{Result}\ (\%) = \frac{\textbf{Bucket 1}}{\textbf{Weekly outflows}}$$

$$\textbf{Result}\ (\%) = \frac{\textbf{Bucket 1} + \textbf{Bucket 2}}{\textbf{Weekly outflows}}$$

RST-03

67. The MMF faces net redemption of its two main investors. The impact of the stress test should be assessed according to weekly liquidity stress test methodology.

$$\textbf{Result}\ (\%) = \frac{\textbf{Weekly liquid assets}}{\textbf{Invested amount two main investors}} * \textbf{100}$$

Example:
Managers of MMFs are expected to: 1) Measure the outflows • The 2 main investors withdraw 100% of their investment 2) Measure bucket 1 and bucket 2 • See RST-02 3) Report the result: • Managers of MMF should report 2 results: $$\textbf{Result}\ (\%) = \frac{\textbf{Bucket 1}}{\textbf{Invested amount two main investors}}$$ $$\textbf{Result}\ (\%) = \frac{\textbf{Bucket 1} + \textbf{Bucket 2}}{\textbf{Invested amount two main investors}}$$

Macro (MST-01; MST-02)

68. Managers should:

- First, measure the impact of a market shock combining different risk parameters (see table)
- Assess the impact of a redemption shock following the market shock. Assets sold in response to the redemption shock will result in additional losses, as defined in the liquidity stress test;
- Report the result as a percentage of NAV;
- Report the value of weekly liquid assets after market shock as a percentage of outflows;
- Report the value of outflows as a memo item.

	Risk factors	**Parameters used for the calibration**

Market shock	• FX Rate	• EUR/USD etc.
	• Interest Rate • Credit • Spread among indices to which interest rates of portfolio securities are tied	• Swap rate • Gov. bond yields/ spreads • Corp. bond yields/ spreads
Redemption shock	• Level of Redemption • Asset liquidity	• % outflows • Bid/ask spread (discount factor)
Results	• % NAV • Weekly liquid assets/ outflows	Q1:
Memo	• % outflows	Q2:

Managers of MMFs are expected to:

1) Measure the combined impact of the risk factors (the market shock)

- Managers of MMFs should use their internal models to measure the combined impact of at least: credit risk; interest rate risk, FX risk.
- When the parameters communicated by ESMA are identical to those used for the other scenarios (e.g. CST-01, FST-01, IST-01, SST-01), the results should not be the aggregation as the combined impact of the shocks should have non-linear effects.

2) Measure the outflows

- Redemption requests should be measured on the NAV after the market shock, following RST-02 methodology.

- In the following example the reporting NAV is 100, the market shock is 10, and the funds experience an outflow rate of 20%:

$$\mathbf{Outflows} = (\mathbf{100} - \mathbf{10}) * \mathbf{20\%} = \mathbf{18}$$

$$\mathbf{NAV\ after\ outflows} = \mathbf{90} - \mathbf{18} = \mathbf{72}$$

- Measure the coverage by bucket 1 and bucket 2 assets. See RST-02.

3) Measure the liquidity impact

- The fund sells assets in a stressed environment characterized by a widening of bid-ask spread as characterized in the liquidity stress test (LST-01). For each security sold, the manager should apply the discount factor provided in the stress test guidelines.

- Only assets sold in response to redemption requests are affected by the liquidity stress. In the previous example the value of assets subject to the liquidity stress is 18 while the value of assets not affected by the liquidity stress is 72.

- For the purposes of the Macro scenario, MMFs are assumed to sell assets pro-rata to their portfolio (no distortion).

- For the purposes of the stress test, the loss is entirely borne by remaining investors (not by redeeming investors).

4) Measure the stressed NAV

- The impact on the NAV is the result of the combined impact of the risk factors, the outflows and the liquidity impact.

$$\textbf{Stressed NAV} = \textbf{Reporting NAV} - \textbf{Market shock} - \textbf{Outflows} - \textbf{Liquidity impact}$$

5) Report the result:

- Managers of MMF should report 3 results:

$$\textbf{Impact on NAV}\ (\%) = \frac{\textbf{Reporting NAV} - \textbf{Stressed NAV}}{\textbf{Reporting NAV}}$$

$$\textbf{Weekly liquidity}\ (\%) = \frac{\textbf{Bucket 1}}{\textbf{Outflows}}$$

$$\textbf{Weekly liquidity}\ (\%) = \frac{\textbf{Bucket 1} + \textbf{Bucket 2}}{\textbf{Outflows}}$$

69. The definitions to be used in the present block 3 are the following ones:

Credit Quality steps:	The Credit Quality Steps (CQS) map the credit assessments issued by External Credit Assessment Institutions (ECAIs). The correspondence of the relevant credit assessments issued by an ECAI to the credit quality steps is specified in the COMMISSION IMPLEMENTING REGULATION (EU) 2016/1799[8].
Maturity:	Unless otherwise specified, managers of MMFs shall use risk factors corresponding to the residual maturity of the instrument.
Valuation price	Valuation price refers to the valuation of MMFs defined in Article 29(3) of MMFR.
Weekly liquid assets	For MMF stress tests, weekly liquid assets are the sum of highly liquid assets and weekly maturing assets. The methodology to measure highly liquid asset is defined in the Guidelines on stress test scenarios under the MMF Regulation.
Weekly tradable amount:	Managers of MMFs report the share of the fund's portfolio that is capable of being liquidated within one week. Such assignment should be based on the shortest period during which such a position could reasonably be liquidated at or near its carrying value[9].

[8] https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ%3AL%3A2016%3A275%3ATOC&uri=uriserv%3AOJ.L_.2016.275.01.0003.01.ENG

[9] Guidelines on reporting obligations under Articles 3(3)(d) and 24(1), (2) and (4) of the AIFMD

Block 4 – Information on the assets

5.2.18 Asset description of the money market instrument (field A.6.2), eligible securitisation or ABCP (field A.6.21), unit or share of other MMF (field A.6.61), deposit or ancillary asset (field A.6.72) and repurchase agreement or reverse repurchase agreement (field A.6.82)

70. Field A.6.2 should be filled in only if there does not exist ISIN (field A.6.3) nor CFI code (field A.6.4) of the money market instrument. Field A.6.21 should be filled in only if there does not exist ISIN (field A.6.22) of the securitisation or asset backed commercial paper. Field A.6.61 should be filled in only if there does not exist ISIN (field A.6.62) nor LEI (field. A.6.63) of the unit or share of other MMF. Field A.6.72 should be filled in only if there does not exist ISIN (field A.6.73) nor CFI code (field A.6.74) of the deposit or ancillary asset. Field A.6.82 should be filled in only if there does not exist ISIN (field A.6.83) of the repurchase agreement or reverse repurchase agreement.

5.2.19 CFI (if available, and if the ISIN is not available) of the money market instrument (field A.6.4), financial derivative instrument (field A.6.43), unit or share of other MMF (field A.6.64), deposit or ancillary liquid asset (field A.6.74), repurchase agreement or reverse repurchase agreement (field A.6.84), and asset referred to in field B.1.3

71. With respect to the CFI code to be provided for the different assets (field A.6.4, A.6.43, A.6.64, A.6.84, B.1.3), in combination with an ISIN, the CFI should be provided, as both are assigned concurrently by the national numbering agencies. If the instrument does not possess an ISIN, a CFI code should also be reported, as per the ISO 10962 standard. In this case, at least the first 2 characters of the CFI code and the character representing asset class (if applicable for a given instrument) should be provided (i.e. these characters cannot be "X", which represents not applicable or undefined value). To guide the reporting entities in the generation of a CFI, ESMA has compiled a mapping of the CFI code, englobing all eligible asset (Annex I). With respect to the CFI code for deposit or liquid ancillary assets (field A.6.74), no CFI code should be provided.

5.2.20 Asset country (fields A.6.8, A.6.23, A.6.50, A.6.66, A.6.75, A.6.85)

72. When reporting information on the geographical focus of the different types of assets, the information should be reported as of the last day of the reporting period (if the information is not available on that last day, managers of MMFs should use the last information available on this topic). Assets that do not have a predominant geographical focus should be included in the category “supranational/multiple regions.

73. For eligible securitisation and asset backed commercial paper (field A.6.23), if there is no sponsor, the country of the originator should be indicated.
74. As per field A.6.8, the country of a money market instrument is the country of the issuer of the money market instrument.

75. In alignment with the above, for financial derivative instruments (OTC and listed derivatives), the country of the financial derivative instrument (field A.6.50) should be the country of the counterparty of the financial derivative instrument. However, for cleared OTC financial derivative instruments, the country of the financial derivative instrument (field A.6.50) should be the country of the CCP.

76. For deposit or ancillary liquid asset, the country (field A.6.75) should be based on the domicile of the entity in which the deposit is deposited. For instance, the domicile of a cash deposit in Euro in a US bank should be the US.

77. For repurchase agreement or reverse repurchase agreement, the country (field A.6.85) should be the domicile of the counterparty to the repurchase agreement or reverse repurchase agreement.

5.2.21 Clean price of the money market instrument (A.6.12 and A.6.13), eligible securitisation or asset backed commercial paper (A.6.30 and A.6.31)

78. With respect to the clean price of the money market instrument (A.6.12 and A.6.13), eligible securitisation or asset backed commercial paper (A.6.30 and A.6.31) these fields should always be reported in absolute terms (in monetary values, not in percentages). Accrued interests (A.6.14, A. 6.15, A.6.32, A.6.33) and Total market values (A.6.16, A.6.17, A.6.34, A.6.35) should also always be reported in absolute terms (in monetary values, not in percentages).

5.2.22 Accrued interests (A.6.14 and A.6.15), Total market value of the money market instrument (A.6.16 and A.6.17), and the method used to price the money market instrument (A.6.18)

79. With respect to fields A.6.14 to A.6.18, if the manager indicates that the method used to price the money market instrument (A.6.18) is “mark-to-model”, or “amortised cost”, it should not fill in the fields related to Clean price (A.6.12 and A.6.13) and Accrued interests (A.6.14 and A.6.15), and the total market value of the money market instrument (A.6.16 and A.6.17) should be understood in that case as the Total value of the money market instrument. If the manager indicates that the method used to price the money market instrument (A.6.18) is “mark to market”, the sum of the fields A.6.13 (clean price) and A.6.15 (accrued interests) should equal the field A.6.17 (total market value).

5.2.23 Asset description of the eligible securitisation or asset backed commercial paper (Field A.6.21), LEI (Field A.6.24) and Name of the sponsor (Field A.6.25)

80. With respect to the asset description of the eligible securitisation or asset backed commercial paper (Field A.6.21), managers should report the securitisation identifier using the format "Securitisation Repository LEI", then a hyphen, and a unique identifier for the securitisation generated and assigned by the securitisation repository. This is a mandatory identifier in particular for assets classified as "STS" as mentioned in Regulation 2017/1131.

81. If the eligible securitisation or asset backed commercial paper does not possess a sponsor, fields A.6.24 (LEI of the sponsor) and A.6.25 (Name of the sponsor) should be filled in using respectively the LEI and name of the originator.

5.2.24 Contract type of derivative contract (Field A.6.39)

82. In order to fill in this field, with respect to the contract type of derivative contract (Field A.6.39), managers should use the following typology of contract types:

- CFDS' for Contracts for difference

- 'FORW' for forwards

- 'FRAS' for Forward Rate Agreements

- 'FWOS' Forwards on a swap

- 'FUTR' for futures

- 'FONS' for Futures on a swap

- 'OPTN' for options

- 'OTHR' for other

- 'SWAP' for swaps

- 'SWPT' for swaption

5.2.25 Name of the underlying (Field A.6.45)

83. With respect to the name of the underlying (Field A.6.45), a number of elements could be specified, in order to complement the requirements included in the Implementing Regulation on reporting and the article 37 of the MMF Regulation. If the financial derivative instrument possesses an ISIN or is an Index, as per field A.6.46, field A.6.45 should not be filled in. In the case of an underlying for which there is no ISIN and that are not indexes, MMF managers should indicate that the value of field A.6.46 is not available.

5.2.26 Exposure of the repurchase agreement or a reverse repurchase agreement (Field A.6.91 and A.6.92)

84. With respect to exposure of the repurchase agreement or a reverse repurchase agreement (Field A.6.91 and A.6.92), the exposure referred to in these fields should be gross exposure.

85. With respect to repurchase agreement, the gross exposure should be understood as the market value of the securities sold to the counterparties of the repo transactions (in exchange of the cash received), without taking into account any netting effects and without considering the collateral received in order to mitigate the counterparty risk arising from these transactions.

86. With respect to reverse repurchase agreement, the gross exposure should be understood as the value of the cash paid to the counterparties of reverse repo transactions (in exchange of securities bought), without taking into account any netting effects and without considering the collateral received in order to mitigate the counterparty risk arising from these transactions.

5.2.27 Internal credit assessment procedure (fields A.6.19, A.6.37 and A.6.95)

87. With respect to the credit assessment referred in fields A.6.19, A.6.37 and A.6.95, if there is no internal credit assessment for a specific asset, it should be included in the corresponding field “not applicable” (for EU Sovereign issuers) or “not performed”

Block 5 – Information on the liabilities

5.2.28 Investor concentration (field A.7.2)

88. With respect to investor concentration (field A.7.2), for MMFs with several unit or share classes, managers of MMFs should consider the percentage of these units or shares in relation to the NAV of the MMF in order to be able to aggregate the percentages of professional investors and retail investors in the MMF. The total should equal 100%. The totals in fields A.7.3 and A.7.4 should also equal 100%.

89. With respect to field A.7.2, the manager of an MMF should also specify the percentage of the NAV on both i) professional clients and ii) retail investors, which is an estimate. There would therefore be four fields to be filled in: i) % of NAV of professional clients, which is not an estimate ii) % of NAV of professional clients, which is an estimate iii) % of NAV of retails clients, which is not an estimate iv) % of NAV of retail clients, which is an estimate.

90. Two corresponding additional subfields should be included in the field of the reporting template to be filled in by manager of MMFs corresponding to the field A.7.2 of the Implementing Regulation on reporting.

91. In particular, further specification on which issuer group taxonomy as provided by the European Central Bank is corresponding to the issuer category as referred to in fields A.6.7 and A.6.86 is provided below:

- Issuer categories "Sovereign (EU)" together with "Sovereign (non-EU)" are corresponding to "Central government" under IG2 code;

- Issuer categories "EU Central Bank" together with "non-EU central bank" are corresponding to "Central bank" under IG1 code;

- Issuer categories "National Public Body" together with "EU Public Body (excluding National Public Body)" and "Non-EU public body" are corresponding to "Public Corporation" under IG11 code;

- Issuer categories "Supranational Public Body (EU)" together with "Supranational Public Body (other than EU)" are corresponding to "Supranational issuer" under IG6 code;

- Issuer category "Credit Institution" is corresponding to "Credit institution (excluding agencies)", "Agency - non credit institutions" and "Agency - credit institution" under IG4, IG7 and IG8 codes;

- Issuer category "Other financial corporations" is corresponding to "Financial corporations other than credit institutions" under IG9 code; and

- Issuer category “Non-financial corporations” is corresponding to “Corporate and other issuers” under IG3 code.

5.2.29 Investor group breakdown (field A.7.3) and Geographical breakdown of investors by country (field A.7.4)

92. The sum of percentages referred to in field A.7.3 should equal 100%.

93. The sum of percentages referred to in field A.7.4 should equal also 100%, and the manager of an MMF should specify the percentage of the NAV for which no country may be specified.

94. Beneficial owners as referred to in fields A.7.1 and A.7.3 should be considered at the level of the legal entity and not at the level of the parents company.

95. In addition, the following list indicates which institutional sector of the economy in accordance with the European System of accounts (ESA) 2010 manual is corresponding to the investor group as referred to in field A.7.3:

- Investor group “Non-financial corporations” is corresponding to “Non-financial corporations” under S11 code
- Investor group “Banks” is corresponding to “monetary financial institutions (MFIs)” under S12K code
- Investor group “Insurance corporations” is corresponding to “Insurance corporations” under S128 code
- Investor group “Other financial institutions” is corresponding to “Other financial institutions” under S12O
- Investor group “Pension plans / funds” is corresponding to “Pension funds” under S129 code
- Investor group “General government” is corresponding to “General government” under S13 code
- Investor group “Other collective investment undertakings” is corresponding to “Non-MMF investment funds” under S124 code
- Investor group “Households” is corresponding to “households and non-profit institutions serving households” under S14 and S15 codes
- Investor group “Unknown” is corresponding to “Unspecified” under S1N code
- The “Rest of the world” under S2 code may not be linked directly to the investor group list as referred to in field A.7.3.

5.2.30 Notice period required by investors (Field A.7.6)

96. With respect to field A.7.6 of the Implementing Regulation on reporting, if there are multiple classes of shares or units, the notice period reported should be the one of the largest share class (associated with the highest NAV proportion or so). In addition, bank working days should be taken into account when filling in the field A.7.6 in "days".

5.2.31 Liquidity arrangements (Field A.7.7)

97. In field A.7.7, the manager of an MMF is to indicate if there are some "Other arrangements for managing illiquid assets" in relation to this MMF. If there are no such other arrangements, the manager of an MMF should include "0" in the field "% of NAV" related to that specific field. In addition, for the purpose of the field A.7.7, the terms "suspension of dealing" may be understood as "suspension of redemption".

5.2.32 Information on the liabilities of the MMF: subscriptions (A.7.9), redemptions (A.7.10), payments to investors (A.7.11), exchange rate (A.7.12)

98. With respect to subscriptions, the date of subscription to be taken into account when filling in the MMF reporting template (field A.7.9) should be the date when the share of the MMF is issued, and not the day when the corresponding amount of the share is actually paid to the MMF"

99. With respect to redemptions, the date of redemption to be taken into account when filling in the MMF reporting template (field A7.10) should be the date when the share of the MMF is redeemed, and not the day when the corresponding amount of the share is actually paid by the MMF. Moreover, dividends paid to investors should not be considered as redemptions for the purpose of the field A.7.10.

100. **With respect to payments to investors, payments to investors as referred to in field A.7.11 include dividends.** For the avoidance of doubt, in the case of accumulating share classes, income generated in the course of the year should not be considered as payments to investors for the purpose of field A.7.11.

101. With respect to the exchange rate referred to in field A.7.12, this reported exchange rate should be the exchange rate at the end of the month corresponding to the reporting of fields A.7.8, A.7.9 and A.7.11 or, if not available at that date, the last preceding available exchange rate. This same exchange rate should be used when filling in EUR all fields A.7.8, A.7.9 and A.7.11.

Block 6 – Information on LVNAV

5.2.33 Information on the price referred to fields B.1.4, B.1.5 (price when the event occurs, using the amortised cost method with respect to B.1.5), B.1.8 (minimum price deviation between two values referred to in field B.1.8), B.1.9 (During the period mentioned in field B.1.6, state the maximum price deviation between the two values) and the average difference between two values referred to in field B.1.7

102. With respect to the price referred to fields B.1.4 and B.1.5 (price when the event occurs, using the amortised cost method with respect to B.1.5), the currency in which this price is expressed should be EUR.

103. With respect to the difference referred to in fields B.1.7, B.1.8 and B.1.9., the figures should be expressed in basis points. In addition, where the manager of the MMF decides to switch definitely the asset from the amortised cost method to the mark to market cost method, the period mentioned in field B.1.6 should stop.

VI. Annex

Annex I[10]

CFI codes for eligible securities

Instrument category	Group	Mandatory letters of the CFI code to be provided
Collective investment vehicles	E Exchange traded funds (ETF)	CE****
Collective investment vehicles	F Funds of funds	CF****
Collective investment vehicles	I Standard (vanilla) investment funds/mutual funds	CI****
Collective investment vehicles	S Pension funds	CS****
Debt instruments	Asset-backed securities	DA****
Debt instruments	Bonds	DB****
Debt instruments	Depositary receipts on debt instruments	DD****
Debt instruments	Structured instruments (without capital protection)	DE****
Debt instruments	Mortgage-backed securities	DG****
Debt instruments	Municipal bonds	DN****

[10] The list of CFI codes may evolve in case of any change at the ISO 10962 standard.

Debt instruments	**Structured instruments (capital protection)**	**DS******
Debt instruments	**Medium-term notes**	**DT******
Debt instruments	**Bonds with warrants attached**	**DW******
Debt instruments	**Money market instruments**	**DY******
Futures	**Baskets**	**FFB*****
Futures	**Currencies**	**FFC*****
Futures	**Debt**	**FFD*****
Futures	**Futures**	**FFF*****
Futures	**Indices**	**FFI*****
Futures	**Interest Rates**	**FFN*****
Futures	**Options**	**FFO*****
Futures	**Swaps**	**FFW*****
Non-listed and complex listed options	**Foreign exchange**	**HF******
Non-listed and complex listed options	**Rates**	**HR******
Forwards	**F Foreign Exchange**	**JF******
Forwards	**R Rates**	**JR******
Listed options	**Baskets (call)**	**OC*B****
Listed options	**Baskets (put)**	**OP*B****
Listed options	**Baskets (other)**	**OM*B****
Listed options	**Currencies (call)**	**OC*C****
Listed options	**Currencies (put)**	**OP*C****
Listed options	**Currencies (other)**	**OM*C****
Listed options	**Debt (call)**	**OC*D****
Listed options	**Debt (put)**	**OP*D****
Listed options	**Debt (other)**	**OM*D****

Listed options	**Futures (call)**	**OC*F***
Listed options	**Futures (put)**	**OP*F***
Listed options	**Futures (other)**	**OM*F***
Listed options	**Indices (call)**	**OC*I***
Listed options	**Indices (put)**	**OP*I***
Listed options	**Indices (other)**	**OM*I***
Listed options	**Interest Rates (call)**	**OC*N***
Listed options	**Interest Rates (put)**	**OP*N***
Listed options	**Interest Rates (other)**	**OM*N***
Listed options	**Options (call)**	**OC*O***
Listed options	**Options (put)**	**OP*O***
Listed options	**Options (other)**	**OM*O***
Listed options	**Swaps (call)**	**OC*W***
Listed options	**Swaps (put)**	**OP*W***
Listed options	**Swaps (other)**	**OM*W***
Swaps	**Foreign exchange**	**SF******
Swaps	**Rates**	**SR******
Financing transaction	**Repos**	**LR******

Annex II

Table 1

Risk factor	Scenario code	Position date	Net asset value basis	Impact on NAV	First bucket outflow impact	Total bucket outflow impact	Input factor	Not Available Value	Additional comment	No Vulnerability or action plan proposed
		Date at which the last stress test was performed (as-of date)	Is the constant net asset value used as a basis for the stress test scenario ?	% of the NAV that is corresponding to the effects of a stressed scenario	Weekly outflows derived from the monthly outflows compared with available weekly liquid assets, considered as the highly liquid assets	Weekly outflows derived from the monthly outflows compared with available weekly liquid assets, considered as the sum of highly liquid assets and weekly maturing assets	Value used as an input for computing stress test effects	Specifies that value is not available for that scenario	Any other additional information about the stress test result	Specifies the action plan that is proposed by the board of directors following a stress test that revealed any vulnerability. In case of no vulnerability, "No vulnerability element" is reported.
Liquidity	**LST-01**									
Credit	**CST-01**									
Credit	**CST-02**									
FX rate	**FST-01**									
FX rate	**FST-02**									
Interest rate	**IST-01**									
Level of redemption	**RST-01**									
Level of redemption	**RST-02**									
Level of redemption	**RST-03**									
Spread among indices	**SST-01**									
Macro	**MST-01**									
Macro	**MST-02**									