

EBA/CP/2023/27

08 NOVEMBER 2023

Consultation Paper

Draft Guidelines establishing the common reference parameters of the stress test scenarios for the liquidity stress tests referred in Article 45(4) Regulation (EU) 2023/1114

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1. Responding to this consultation

The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 5.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed/ rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 08 February 2024. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested from us in accordance with the EBA's rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA's Board of Appeal and the European Ombudsman.

Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EU) 1725/2018 of the European Parliament and of the Council of 23 October 2018. Further information on data protection can be found under the Legal notice section of the EBA website.

2. Executive Summary

Article 45(4) of Regulation (EU) 2023/1114 of the European Parliament and the Council¹ requires issuers of significant assets referenced tokens to conduct liquidity stress testing on a regular basis.

The requirement of carrying out the said regular liquidity stress testing applies as well to electronic money (e-money) institutions issuing e-money tokens that are significant by virtue of Article 58(1), point (a), of Regulation (EU) 2023/1114 and can be expanded to issuers of assets referenced tokens that are not significant as well as to e-money institutions issuing e-money tokens that are not significant, if the competent authority of the home Member State requires it so following Article 35(4) and Article 58(2) of Regulation (EU) 2023/1114, respectively.

The supervisory authority, based on the outcome of the liquidity stress testing, may decide to strengthen the liquidity requirements related to the management of the reserve of assets and to the minimum content of the liquidity management policy and procedures, mainly.

With these Guidelines (GL) the EBA is complying with its mandate in Article 45(8) of Regulation (EU) 2023/1114 to establishing, in close cooperation with ESMA and the ECB, the common reference parameters of the stress test scenarios to be included in the liquidity stress testing. Regulation (EU) 2023/1114 requires to update the GL periodically taking into account the latest market developments.

In the development of the mandate the EBA is taking into account Regulation (EU) 2023/1114 and the draft RTS to specify the highly liquid financial instruments in the reserve of assets, under Article 38(5), the draft RTS to specify the minimum content of the liquidity management policy and procedures, under Article 45(7)(b) and the draft RTS further specifying the liquidity requirements of the reserve of assets, under Article 36(4). These draft RTS are being publicly consulted in parallel to these draft Guidelines.

Next steps

The guidelines will be translated into the official EU languages and published on the EBA website. The deadline for competent authorities to report whether they comply with the guidelines will be two months after the publication of the translations. The EBA will finalise these guidelines once the consultation responses have been assessed.

¹ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (OJ L 150, 9.6.2023, p. 40–205)”.

3. Background and rationale

1. Issuers of significant assets referenced tokens (ARTs) and e-money institutions issuing significant e-money tokens (EMTs) (as well as issuers of ARTs that are not significant and e-money institutions issuing EMTs that are not significant, both if required by the relevant competent authority of the home Member State)² are required in Regulation (EU) 2023/1114 to conduct liquidity stress testing on a regular basis.
2. The liquidity stress testing will help issuers of tokens to better manage their reserve of assets and generally their liquidity risk. Based on the outcome of the liquidity stress testing the EBA or, where applicable, the relevant competent authority/supervisor, may decide to strengthen the liquidity requirements of the issuer as indicated by Article 45(4) Regulation (EU) 2023/1114:
 - a. By ensuring an effective and prudent management of the reserve of assets, aimed to ultimately cover the amount of the assets referenced, such that the redemption of the tokens upon request of their holders at any time, including during stress, can be done with the reserve of assets, and to ensure that every issuance of tokens is accompanied by an increase of the reserve of assets.
 - b. By reinforcing the minimum content in the liquidity policy management and procedures of issuers as established in the **[RTS XXX/2024 specifying the minimum content of the liquidity management policy and procedures of issuers under Article 45(7)(b)]** Regulation (EU) 2023/1114].
3. Article 45(8) Regulation (EU) 2023/1114 mandates the EBA to issue guidelines with a view to establishing the common reference parameters of the stress test scenarios to be included in the liquidity stress testing. The EBA shall update the guidelines periodically taking into account the latest market developments.
4. First, the EBA identifies in these guidelines the parameters that need to be analysed under the liquidity stress testing to cover the relevant risks. Second, following application of the guidelines, the supervisor may strengthen the liquidity requirements of the issuer to cover those risks based on the outcome of the liquidity stress testing. For example, by setting a higher amount of the reserve of assets, a higher diversification of its composition or a shorter maturity of the assets, that will ensure under different stress scenarios their rapid liquidation with minimal liquidity, credit, market and concentration risk and a prompt execution of any redemption request by token holders; or by

² As envisaged in paragraph 4 of Article 45 (on significant ARTs) in conjunction with paragraph 1 of Article 58 (on significant EMTs issued by e-money institutions), paragraph 4 of Article 35 (on non-significant ARTs) and paragraph 2 of Article 58 (on non-significant EMTs issued by e-money institutions).

strengthening the contingency policy of the issuer with reinforced early warning signals or mitigation tools upon potential stress scenarios.

5. The next items in the background describe the risks that the EBA has identified to be covered in the liquidity stress testing and the methodology identifying the common reference parameters of the stress test scenarios to be included in the liquidity stress testing to be applied.
6. As a background, it should be noted that following Regulation (EU) 2023/1114 and the **RTS XXX/2024 specifying the highly liquid financial instruments under Article 38(5) Regulation (EU) 2023/1114**, the reserve of assets may be composed of the following assets:
 - a. Deposits with credit institutions (they should amount to at least 30% of the assets referenced in each official currency – 60% if the token is significant – and to a minimum credit quality such that there is no reason to expect non-performance), commodities and other assets that are received in the issuance of the token and are not invested. The deposits held with credit institutions are subject to the following maximum concentration limits by deposit counterparty:
 - i. 10% of the reserve of assets, or 5% if the credit institution receiving the deposits is not a large institution; and
 - ii. 2.5% of the total assets of the institution taking the deposits.
 - b. Highly liquid financial instruments at market value in which the issuer may invest:
 - i. LCR Level 1 (L1), as defined in Commission Delegated Regulation (EU) 2015/61³, assets subject to 0% haircut, mainly exposures to central government and central banks. Securities here are subject to a concentration limit by issuer/guarantor of 35% of the reserve of assets.
 - ii. L1 covered bonds, capped at 35% of the reserve of assets and subject to a concentration limit by issuer/guarantor of 10% of the reserve of assets.
 - iii. Financial instruments used as assets referenced subject to a concentration limit by securities issuer/guarantor of 5% of the reserve of assets.
 - iv. Derivatives exposures, for the purposes of the valuation of other highly liquid financial instruments, with a concentration limit of 5% of the reserve of assets (or 10% if the counterparty is a credit institution).

³ Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions Text with EEA relevance (OJ L 11, 17.1.2015, p. 1–36).

- v. A general 25% of the reserve of assets concentration limit applies to all exposures against the same counterparty/issuer/guarantor.

3.1 Identified risks to be assessed in the liquidity stress testing

3.1.1 Redemption risk

7. The risk of redemption is mainly linked to the liability side of the issuer of tokens and the proneness to redemption requests by the token holders.
8. Issuers need to make sure that the amount of the reserve of assets is sufficient to meet any redemption request that can be made by token holders at any point in time. This should include cases of stress scenarios where massive redemption requests could arise triggered by different drivers as experience has evidenced, e.g. idiosyncratic events related to the issuer, to counterparties where the reserve of assets are materialized, market wide systemic events in the crypto ecosystem and financial system (reputational issues, solvency/liquidity issues, ...) and token holders' risk profile.
9. A massive redemption request might easily trigger fire sales or massive deposit withdrawals that can ultimately negatively impact the capacity of the issuer, the deposit counterparty and the general financial market and crypto ecosystem. If this is the case and a timely redemption is not met in a sound manner further redemption requests across tokens and issuers can take place aggravating the situation of the issuer, the financial system and crypto ecosystem and the general financial markets.

3.1.2 Risk related to deposits with credit institutions

10. This risk is related to the part of the reserve of assets in the form of deposits with credit institutions.
11. The possibility of non-performance in deposits with credit institutions needs to be considered under stress. Deposits with credit institutions are expected to be liquidity resources of the issuer for prompt use in case of redemption request by the token holders at any time, including during stress periods. The required amount of these assets by Regulation (EU) 2023/1114 is material in the case of tokens referenced to official currencies, 30% of the assets referenced, or 60% if the token is significant. Generally, also for other tokens, deposits with credit institutions are expected to reach a minimum value to still ensure prompt redemption in funds if needed.
12. Deposits with credit institutions are a link of interconnectedness between the banking system and the crypto ecosystem. Any potential distortion in the liquidation of the deposits may bring consequences in both; reputational risks might arise in the banking system if the credit institution is not able to repay the deposits in time and confidence in crypto assets could be damaged if redemption cannot be met in time. All this can bring massive redemption requests in the crypto system with subsequent deposits run-off if full performance is not guaranteed in the deposits with credit institutions.

3.1.3 Market risk and volatility

13. This risk is mainly related to the part of the reserve of assets of token invested in securities or other assets not replicating the assets referenced.
14. Market risk in the reserve of assets might put their market value (after derivative hedges) at risk of not meeting the market value of the assets referenced, which represents the obligation of the issuer against the token holders. This might be the case in tokens referenced to official currencies but also to tokens with other assets referenced (e.g. commodities where the assets do not replicate the obligations).
15. In addition, different volatility and lack of correlation between the reserve of assets and the assets referenced could lead again to an insufficient amount of reserve of assets. This is the case where changes in the market value of the reserve assets are different to the market value changes of the assets referenced and this difference is not fully hedged with derivatives.
16. This risk might become exacerbated in times of stress and when the issuer might not timely meet redemption requests from token holders that may in turn trigger such request from other token holders and extend a liquidity distress situation to other issuers. The related shock transmission channel to be considered is due to reputational reasons and lack of confidence in crypto assets, and subsequently to the banking system if accompanied by massive deposit withdrawals and even financial markets in general with potential fire sales.

3.1.4 De-pegging risk

17. This is the risk that the token referenced to an official currency may lose its par value. This is the case where the market value of the token might become lower than the par value versus the official currency. De-pegging risk refers to the differences between the market value of the token and the market value of the asset referenced while market risk is referred to the market value of the reserve of assets for the purposes of assessing its effectiveness to redeem the token holders by the market value of the assets referenced.
18. A situation where the par value (redemption value) would be higher than the market value would trigger massive redemption requests by the token holders. This could trigger fire sales, massive withdrawals of deposits with the consequences already discussed where the reserve of assets might ultimately not be sufficient to meet the redemption requests.
19. This risk can be triggered, for example, by idiosyncratic reasons like solvency or reputational related ones. The liquidity stress testing should assess this risk and analyse if additional liquidity requirements are needed, like additional reserve of assets in order to mitigate potential consequences of the loss of the par value.

3.2 Liquidity stress testing methodology

20. These Guidelines identify the parameters that the liquidity stress testing needs to assess to cover the relevant risks. Based on them, the tokens' issuers should determine and calibrate the liquidity stress scenarios and stress factors/weights that should apply to the reserve of assets, in the asset side, and to the assets referenced by the assets referenced tokens, in the liability side.

21. The weighted market value (or weighted amount if not marketable, e.g. deposits) under stress of the reserve of assets is compared with the weighted market value of the assets referenced by the assets referenced tokens under stress. The outcome of this tests the capacity of the reserve of assets to meet the redemption requests of the token holders under stress that supervisors should consider for potential strengthening liquidity requirements in terms of additional reserve of assets or reinforced qualitative liquidity management.

22. This methodology:

- a. meets the expectations of the mandate that refers to the issuance of guidelines "with a view to establishing **the common reference parameters** of the stress test scenarios ... ". There is no expectation that specific stress factors/weights should be established by the Guidelines necessarily. The common reference parameters should be established to serve as harmonised sources of information to be taken into account by the tokens' issuers for the determination of such stress factors.
- b. captures the nature and substance of the liquidity stress testing which is for the purposes of assessing the need of potential further liquidity requirements on an issuer-by-issuer basis. To be noted that Regulation (EU) 2023/1114 requires the liquidity stress testing to be undertaken for all the asset referenced tokens issued and crypto-services provided by the issuer in a holistic and comprehensive manner.
- c. is consistent with the fact that this is a new business activity and, therefore, there is lack of historical observations under normal and stress conditions, mainly after the introduction of Regulation (EU) 2023/1114, as to be able to estimate calibration factors to stress relevant assets and liabilities in a harmonized manner via Guidelines.
- d. provides harmonised stress testing elements as to the risks and parameters to be assessed and the approach to follow to assess potential strengthening liquidity requirements.

4. Draft guidelines

EBA/GL/20XX/XX

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draft Guidelines

establishing the common reference parameters of the stress test scenarios for the liquidity stress tests referred in Article 45(4) Regulation (EU) 2023/1114

1. Compliance and reporting obligations

Status of these guidelines

1. This document contains guidelines issued pursuant to Article 16 of Regulation (EU) No 1093/2010⁴. In accordance with Article 16(3) of Regulation (EU) No 1093/2010, competent authorities and issuers of assets referenced tokens⁵ must make every effort to comply with the Guidelines.
2. Guidelines set the EBA view of appropriate supervisory practices within the European System of Financial Supervision or of how Union law should be applied in a particular area. Competent authorities as defined in Article 3(1), point (35) of Regulation (EU) 2023/1114⁶ to whom guidelines apply should comply by incorporating them into their practices as appropriate (e.g. by amending their legal framework or their supervisory processes).

Reporting requirements

3. According to Article 16(3) of Regulation (EU) No 1093/2010, competent authorities must notify the EBA as to whether they comply or intend to comply with these guidelines, or otherwise with reasons for non-compliance, by **[dd.mm.yyyy – two months after publication of the translations of the guidelines to all official languages]**. In the absence of any notification by this deadline, competent authorities will be considered by the EBA to be non-compliant. Notifications should be sent by submitting the form available on the EBA website with the reference 'EBA/GL/**202x/xx**'. Notifications should be submitted by persons with appropriate authority to report compliance on behalf of their competent authorities. Any change in the status of compliance must also be reported to EBA.
4. Notifications will be published on the EBA website, in line with Article 16(3).

⁴ Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC, (OJ L 331, 15.12.2010, p.12).

⁵ This refers to issuers of significant assets referenced tokens by virtue of Article 45(4) of MiCAR. It also includes electronic money (e-money) institutions issuing e-money tokens that are significant, following Article 58(1) of MiCAR, and can be expanded to issuers of assets referenced tokens that are not significant as well as to e-money institutions issuing e-money tokens that are not significant, if the competent authority of the home Member State requires it so following Article 35(4) and Article 58(2) of MiCAR, respectively.

⁶ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (OJ L 150, 9.6.2023).

2. Subject matter, scope and addressees

Subject matter

5. These guidelines establish, in accordance with paragraph 8 of Article 45 of Regulation (EU) 2023/1114, the common reference parameters of the stress test scenarios to be included in the liquidity stress testing referred to in paragraph 4 of Article 45 that Regulation.

Scope of application

6. These guidelines apply to issuers of significant asset-referenced tokens and electronic money (e-money) institutions issuing e-money tokens (in accordance with Article 58(1), point a, of Regulation (EU) 2023/1114) as defined in points 6 and 7, respectively, of Article 3(1) of that Regulation, and non-significant when the competent authority of the home Member State requires it so in accordance with Article 35(4) and Article 58(2) of the same Regulation (hereinafter, for the purpose of these guidelines, jointly referred, as the “issuers of ARTs/EMTs”).

Addressees

7. These guidelines are addressed to competent authorities as defined in Article 3(1) point (35) of Regulation (EU) 2023/1114 to whom these guidelines apply.
8. These guidelines are also addressed to the issuers, as defined in point 10 of Article 3(1) of Regulation (EU) 2023/1114, to whom these guidelines apply, of:
 - a) asset-referenced tokens as defined in Article 3(1), point 6 of that Regulation (issuers of asset-referenced tokens -ARTs-); and
 - b) and e-money institutions issuing e-money tokens defined in Article 3(1), point 7 of that Regulation (issuers of e-money tokens -EMTs-).

3. Implementation

Date of application

9. These guidelines apply from two months after the date of publication on the EBA's website of the guidelines in all EU official languages (date of issuance of the guidelines).

Transitional provisions

- 10.[to be determined if needed]

4. Guidelines on the common reference parameters of the stress test scenarios in the liquidity stress testing

4.1 General provision

11. According with Article 45(4), 2nd subparagraph, Regulation (EU) 2023/1114, issuers of ARTs/EMTs should assess the risks under section 4.2 and apply the methodology under section 4.3, including the parameters of the stress test scenarios, considering all the asset-referenced and e-money tokens offered and activities related to them.

4.2 Risks to be assessed

4.2.1 Redemption risk

12. Issuers of ARTs/EMTs should assess under stress the proneness to redemption requests at any time.

13. For the purpose of paragraph 12, issuers of ARTs/EMTs should consider all the following aspects: the profile of the token holders (including retail or wholesale); the type of token (including if it is significant or not); the type of asset referenced (such as, official currency or other); the characteristics of the issuer (such as, credit institution or other); historical experience of redemption requests; and, the maturity profile of the reserve of assets. Issuers may consider any other aspect they deemed relevant for the assessment.

14. Issuers of ARTs/EMTs should assess the need to complement the percentages of the reserve of assets with a residual maturity of up to one or five working days required by the **[RTS XXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 36(4) Regulation (EU) 2023/1114]**, by estimating a 99% confidence interval relative to the average redeemed amount in the worst cases observed of 1 and 5 days residual maturity in terms of gross outflows, based on their particular historical observations.

4.2.2 Risk related to deposits with credit institutions

15. Issuers of ARTs/EMTs should assess under stress the possibility of failure to a prompt access to the amount of the deposits held in credit institutions as part of the reserve of assets.

16. For the purposes of paragraph 15, issuers of ARTs/EMTs should consider all of the following aspects: i) the credit quality and the liquidity profile of the deposit counterparty; ii) the concentration by counterparty and custodian; iii) the location of the deposit; iv) the maturity of the deposit; v) the potential collateral (including volume, type or quality) lying under the deposit; and, vi) any risk factor not covered by the **[RTS XXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 36(4) Regulation (EU) 2023/1114]** they may consider relevant for this risk.

4.2.3 Market risk and volatility

17. Issuers of ARTs/EMTs should assess under stress the need of additional liquidity requirements to cover the market risk of the reserve of assets as well as its currency denomination differences, volatility and correlation relative to the one of the assets referenced, taking into account related hedging derivatives in place and in addition to the mandatory overcollateralization as established in the **[RTS XXXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 36(4) Regulation (EU) 2023/1114]**.

18. Issuers of ARTs/EMTs should take into account the cases where the historical lookback approach stipulated (in **RTS XXXX/2024**) on the mandatory overcollateralisation is based on a 5 years period where no stress event has taken place. In these cases, for example, longer than 5 years periods including stress events should be considered or stress assumptions should be incorporated.

4.2.4 De-pegging risk

19. Issuers of ARTs/EMTs should assess the risk that the market value of the ARTs/EMTs differ from the market value of the asset referenced and whether additional liquidity requirements are necessary to mitigate that difference.

4.3 Methodology

4.3.1 The liquidity stress testing

20. Issuers of ARTs/EMTs should compare the total weighted amount of the reserve of assets with respect to the total weighted amount of the assets referenced by the ARTs/EMTs, under stress.

21. For the purposes of paragraph 20, issuers of ARTs/EMTs should calculate the total weighted amount of the reserve of assets as the result of multiplying the market value of each asset in the reserve of assets by the relevant stress factor (weight). In the case of assets that are not marketable (such as cash or deposits in credit institutions), issuers of ARTs/EMTs should take the amount multiplied by the relevant stress factor.

22. That total weighted amount of the assets referenced by the tokens is the result of multiplying the market value of the assets referenced by the relevant stress factor. In the case of ARTs/EMTs referenced to official currencies their monetary value should be taken as weighted amount of the assets referenced.

23. A shortfall of the reserve of assets in the liquidity stress testing arises where the total weighted amount of the reserve of assets is lower than the weighted amount of the assets referenced by the tokens, under stress.

Explanatory box:

Total weighted reserve assets (under stress)

- Deposits with credit institutions: amount x stress factor (weight) to deposits
- Commodities (gold, oil, ...): market value x stress factor (weight) to commodities
- Sovereign bonds: market value x stress factor (weight) to sovereign bonds
- Covered bonds: market value x stress factor (weight) to covered bonds
- Other financial instruments as highly liquid financial instruments: market value x stress factor (weight) to other financial instrument

Total weighted assets referenced by the tokens (under stress) - liabilities

- Asset referenced other than official currencies: market value of the asset referenced x stress factor (weight) to asset referenced
- Assets referenced to official currencies: monetary value of the assets referenced

Shortfall under liquidity stress testing = total weighted reserve assets – total weighted assets referenced by the tokens

4.3.2 Identification of the common referenced parameters of the stress test scenarios

24. Issuers of ARTs/EMTs should calibrate and determine the relevant stress factors for each asset of the reserve of assets and for the assets referenced by the ARTs/EMTs under various stress scenarios and time horizons, including 1 day, 5 days, 30 days and 1 year.

25. Issuers of ARTs/EMTs should base the calibration of the stress factors on historical observations (their own observations plus observations from market events) and expert judgment. Issuers of ARTs/EMTs should have a historical documentation of data series of observations and detailed rationale for any expert judgment proving the appropriateness of the calibration.

26. The stress factor for a specific asset class should be constructed considering the combination of risk factors and parameters relevant for the asset class under different stress events/scenarios from an idiosyncratic and market wide perspective. The severity of the shocks should be determined by the severity of the given stress scenario (including the time horizon). Therefore, different stress factors for the same asset class may be derived for each scenario.
27. The stress factor to be applied to each asset of the reserve of assets should be lower than 100%. The stress factor to be applied to the assets referenced should be higher than 100% if the tokens are not referenced to official currencies.
28. In the determination of the stress factors issuers of ARTs/EMTs should assess all the following parameters and take into account the risks envisaged in section 4.2 of these Guidelines. Issuers of ARTs/EMTs may also consider other relevant parameters and risks not already considered and which are not inconsistent with those in these guidelines.

a) Parameters related to the calibration of the stress factors of the reserve of assets

29. In the determination of the stress factors to the following assets in the reserve of assets, issuers ARTs/EMTs should take into account under stress all the following parameters:

a. Deposits with credit institutions:

- i. the credit quality of the deposit taking institution and expectations of non-performance;
- ii. the credit and liquidity quality of the underlying collateral if the deposit is collateralised;
- iii. the concentration by the deposit taking institution;
- iv. the tenor and early withdrawal options; and
- v. the roll-over risk stemming from securities financing transactions, especially repos, where cash is received against non-liquid assets⁷.

b. Commodities:

- i. the extent to which the reserve assets replicate the assets referenced by the tokens; and

⁷ Liquid assets to be understood as those defined in Article 3 (1) and (2) as 'level 1 assets' or 'level 2 assets', respectively, of Commission Delegated Regulation (EU) 2015/61 of 10 October 2014, to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions (OJ L 011 17.1.2015, p.1).

- ii. the potential delivery risk and costs associated if the redemption is in physical.
- c. **LCR level 1 liquid assets subject to 0% haircuts (as referred to in Article 1 of the RTS XXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 38(5) Regulation (EU) 2023/1114):**
- i. the weighted average residual maturity/duration to take into account their potential sensitivity to interest rate risk and related volatility;
 - ii. the country risk premium to take into account their related volatility;
 - iii. the concentration by issuer;
 - iv. the location of the security (custodian) to take into account any potential challenge for a prompt transfer; and
 - v. the evolution of the market value of the specific security, to assess their volatility and correlation with respect to the assets referenced.
- d. **LCR level 1 covered bonds (as referred to in Article 1 of the RTS XXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 38(5) Regulation (EU) 2023/1114):**
- i. the required LCR haircuts;
 - ii. the weighted average residual maturity/duration to take into account their potential sensitivity to interest rate risk and related volatility,
 - iii. their percentage of the reserve of assets,
 - iv. the concentration by issuer,
 - v. the location of the security (custodian) to take into account any potential challenge for a prompt transfer,
 - vi. the evolution of the market value of the specific security, to assess their volatility and correlation with respect to the assets referenced.
- e. **other highly liquid financial instruments (as referred to in Article 1 of the RTS XXX/2024 further specifying the liquidity requirements of the reserve of assets under Article 38(5) Regulation (EU) 2023/1114):**
- i. the required LCR haircuts;
 - ii. the weighted average residual maturity/duration to take into account their potential sensitivity to interest rate risk and related volatility;
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- iii. their percentage of the reserve of assets;
- iv. the concentration by issuer;
- v. the location of the security (custodian) to take into account any potential challenge for a prompt transfer; and
- vi. the evolution of the market value of the specific security, to assess their volatility and correlation with respect to the assets referenced.

b) Parameters related to the calibration of the stress factors of the assets referenced

30. In the determination of the stress factors to the assets referenced by the tokens, issuers of ARTs/EMTs should take into account under stress all the following parameters:

- i. volatility and distributional indicators of the market value of the reserve of assets (such as mean, quartiles and distribution of the market value of the reserve of assets);
- ii. volatility and distributional indicators with respect to the assets referenced (such as mean, quartiles and distribution of the market value of the assets referenced);
- iii. idiosyncratic stress factors (such as liquidity, solvency soundness of the issuer);
- iv. market wide stress factors (such as stress factors in the financial system or the crypto eco-system, number and magnitude of deviations between the token price and the market value of the asset referenced by the token).

5. Accompanying documents

5.1 Draft cost-benefit analysis / impact assessment

1. Article 16(2) of the EBA Regulation (Regulation (EU) No 1093/2010 of the European Parliament and of the Council) provides that, where appropriate, the EBA should analyse ‘the related potential costs and benefits’ of Guidelines issued by the EBA. Such analysis shall be proportionate in relation to the scope, nature and impact of the Guidelines. The following section provides an impact assessment of the Guidelines. It includes an overview of the findings regarding the problems to be dealt with, options available to tackle the problems, and cost-benefit analysis compared with the baseline scenario.
2. The following sections focus on the description of the elements that guided the choice of the policy options to be followed for the definition of the risk factors to be covered in the stress scenarios and for the calibration of the stress factors/weights. It is noteworthy that this is a qualitative assessment describing the pros and cons that informed the decision-making process.

5.1.1 Risk factors policy options

3. The EBA has assessed two policy options:
 - Policy option A: The GL identify the risks that need to be covered in the Liquidity Stress Testing.
 - Policy option B: The GL do not identify the risks that need to be covered in the Liquidity Stress Testing and the issuer would have full freedom and no constraints in the determination of the risks to cover.

	Advantages	Disadvantages
Policy option A	<p>Enhanced harmonization across the EU;</p> <p>General approach, still ensuring issuers an adequate degree of freedom when defining their liquidity risk management practices, and allowing to reflect their specific characteristics;</p>	<p>Possibility that the specific risk profile of the issuer is not fully reflected in a general approach.</p>

	Advantages	Disadvantages
	<p>Possibility to introduce proportionality rules to account for the scale, size and complexity of the token and the issuer;</p> <p>Comprehensive approach aimed at ensuring that systemic threads are properly addressed;</p> <p>High comparability of results.</p>	
Policy option B	<p>Issuer-specific approach, ensuring that the specific characteristics of the issuers are fully reflected in the liquidity risk management framework;</p> <p>The issuer can leverage its knowledge to identify risks that need to be tackled given the token and the holders characteristics (i.e., idiosyncratic risks);</p> <p>A virtuous risk management structure may create examples of good practices to be shared with the industry.</p>	<p>A not adequate risk management structure may introduce constraints on the ability of the issuer to identify risks to be tackled;</p> <p>Great degree of variability across issuers, with consequent lower ability to tackle systemic risks;</p> <p>Low comparability of results across issuers;</p> <p>This approach would require non-negligible operational costs for issuers, as excessive communication between institutions, CAs and EBA would be needed to assess that the specific framework established by issuers is appropriate to address their risk (guidelines on ST).</p>

- The EBA opted for policy option A to ensure a minimum harmonization of the risks that should be considered in the liquidity stress testing and that ultimately define the basis for the harmonized identification mandated in Article 45(8) MiCAR of the parameters of the stress scenarios. Still the specificities by issuer and token can be considered in the analysis of the specific risks.

5.1.2 Calibration approach

5. The EBA has assessed two policy options:

- Policy option 1: the specific calibration of the stress factors/weights to be provided in the GL
- Policy option 2: the calibration of the stress factors/weights to be determined by the issuer.

	Advantages	Disadvantages
Policy option 1	<p>Harmonised practice across the EU;</p> <p>Enhanced results comparability.</p> <p>Lower operational burden for issuers.</p>	<p>Lack of historical observations under stress conditions to calibrate stress factors for all issuers and tokens. Only in the future this could be a potential option based on supervisory experience.</p> <p>The specificities of the issuers are not considered and idiosyncratic risk drivers are disregarded which is key in the determination of liquidity requirements based on the outcome of the liquidity stress testing as envisaged in Article 45(4) of MiCAR;</p> <p>Update of the calibration of the stress factors subject to regulatory changes calendars.</p>
Policy option 2	<p>Enhanced risk sensitivity, in that weights calibrated leveraging internally developed procedures can prove to be more sensitive to the idiosyncratic drivers of risk (BCBS on IRB).</p> <p>An issuer-by-issuer analysis is consistent with the purposes of the liquidity stress testing in MiCAR, i.e. to assess potential strengthening of the liquidity requirements by the supervisor</p>	<p>Black box risks (i.e., not transparent estimation techniques), however the proposed RTS to specify the minimum content of the liquidity management policy and procedures under Article 45(7)(b) requires that all the information related to the calibration of the stress factors will be included therein;</p> <p>Lack of historical data needed to perform the calibration;</p>

	Advantages	Disadvantages
	<p>based on the outcome of the liquidity stress testing.</p> <p>A virtuous risk management structure may create examples of good practices to be adopted by the rest of the industry;</p> <p>The identification of the risk factor and parameters of the stress scenarios ensure a minimum harmonisation for the calibration of the stress factors/weights.</p> <p>Ongoing update of the calibration of the stress factors.</p>	<p>Risk that, given the novelty of the topic, the issuers will move in significantly different directions, lowering the compatibility of results.</p>

6. The EBA opted for policy option 2. The EBA prevails the implementation of the idiosyncratic risk drivers in the calibration of the stress factors/weights to ensure consistency with the expectation in Article 45(4) MiCAR for supervisor to strengthen liquidity requirements if needed for issuers based on the outcome of the liquidity stress testing that need to take into account their own specificities.

5.2 Overview of questions for consultation

- Question 1.** Do respondents have any comment with respect to the proposed non-restrictive list of parameters of the stress test scenarios that need to be considered for the calibration of the stress factors?
- Question 2.** Do respondents have any comment about the risks identified that need to be covered by the parameters of the stress test scenarios? Do respondents think that any other risk should be included?
- Question 3.** Do respondents find operational challenges in the implementation of the guidelines?
- Question 4.** Do respondents find any piece of the guidelines confusing or difficult to understand?