

EBA/CP/2023/24

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# Consultation Paper

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Draft Regulatory Technical Standards

to specify the highly liquid financial instruments with minimal market risk, credit risk and concentration risk under Article 38(5) of Regulation (EU) 2023/1114

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# 1. Responding to this consultation

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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

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Article 38(1) of Regulation (EU) 2023/1114 requires that issuers of asset-referenced tokens, irrespective of whether they are significant or not, that decide to invest the proceeds they receive from the issuance of the tokens and form part of the reserve of assets, shall do it in financial instruments that are highly liquid and with minimal market risk, credit risk and concentration risk. These highly liquid financial instruments shall be capable of being liquidated rapidly with minimal adverse price effect since they need to be effective to be able to meet in a prompt manner any redemption request stemming from the token holders at any time including under stress.

The requirement of a reserve of assets applies as well to electronic money (e-money) institutions issuing e-money tokens that are significant by virtue of Article 58(1) of Regulation (EU) 2023/1114 and can be expanded 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 58(2) of Regulation (EU) 2023/1114.

With these draft Regulatory Technical Standards (RTS) the EBA is complying with its mandate in Article 38(5) of Regulation (EU) 2023/1114 to specify the financial instruments that can be considered highly liquid and bearing minimal market risk, credit risk and concentration risk. With this the identification of eligible investments of the reserve of assets becomes harmonized and transparent.

In the development of the mandate the EBA is required to take into account the various types of assets that can be referenced by an asset-referenced token and the correlation between the asset referenced by the asset-referenced token and the highly liquid financial instruments that the issuer might invest in, in order to mitigate different market value volatilities between them to ensure that the amount of the reserve of assets can meet at all times the market value of the asset referenced for any redemption request that can arise. Furthermore, in the specification of highly liquid financial instruments, the EBA needs to take into account the LCR framework and the UCITs framework, the latter particularly to determine concentration limits in the investment of highly liquid financial instruments by issuer, which is also part of the mandate.

### Next steps

The draft regulatory technical standards will be submitted to the Commission for endorsement following which they will be subject to scrutiny by the European Parliament and the Council before being published in the Official Journal of the European Union.

## 3. Background and rationale

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1. Article 36(1) of Regulation (EU) 1114/2023 on markets in crypto-assets (Regulation (EU) 2023/1114) requires issuers of asset-referenced tokens (ARTs), whether they are significant ARTs or not, to constitute and maintain a reserve of assets at all times to cover their liabilities against the holders of their issued ARTs matching the risks reflected within said liabilities. Article 58(1) extends that requirement to e-money institutions issuing significant e-money tokens (EMTs). Furthermore, Article 58(2) envisages the possibility that competent authorities may impose that requirement as well to e-money institutions issuing EMTs that are not significant.
2. The reserve of assets shall be composed of the assets that the issuer receives and keeps when issuing the tokens (e.g. deposits with credit institutions, commodities, financial instruments...) and by the highly liquid financial instruments the issuer may invest in.
3. In the case of ARTs referencing one or more official currencies, the reserve of assets shall be composed of deposits in credit institutions by at least 30%<sup>1</sup> (or 60%<sup>2</sup> if required by the relevant competent authority) of the amount of the assets referenced in each official currency for issuers of ARTs that are not significant, or 60%<sup>3</sup> in the case of issuers of significant ARTs.
4. The minimum amount of deposits in credit institutions of 60% of the amount referenced is also required in the case of e-money institutions issuing EMTs that are significant<sup>4</sup>. E-money institutions issuing EMTs that are not significant can be required by their competent authority to have a minimum of 30%<sup>5</sup> or 60%<sup>6</sup> in the form of deposits in credit institutions.
5. This minimum required amounts of deposit in credit institutions within the reserve of assets does not apply in the case of ARTs referencing assets other than official currencies, for example commodities or financial instruments. However, in the case of these ARTs, funds received by the issuer when issuing the token may be kept as deposits in credit institutions on a voluntary basis within the reserve of assets. Indeed Article 38(1) envisages that ARTs issuers may invest a part of the reserve of assets in highly liquid financial instruments but are not obliged to do it and, therefore, have the possibility to keep the funds received from the issuance of the ARTs.
6. In the case of ARTs referencing a combination of official currencies with assets other than official currencies the minimum required amount of deposits in credit institutions within the reserve of assets applies for the part of amount referencing official currencies only.

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<sup>1</sup> Article 36(4)(d) MiCAR

<sup>2</sup> Article 35(4) MiCAR in conjunction with Article 45(7) MiCAR

<sup>3</sup> Article 45(7) MiCAR

<sup>4</sup> Article 58(1) MiCAR in conjunction with Article 45(7) MiCAR

<sup>5</sup> Article 58(2) MiCAR in conjunction with Articles 58(1) and 36(4)(d) MiCAR

<sup>6</sup> Article 58(2) MiCAR in conjunction with Articles 58(1) and 45(7) MiCAR

7. Article 38(1) refers to the part of the reserve of assets that issuers invest in. This part shall be composed of highly liquid financial instruments with minimal market risk, credit risk and concentration risk that can be liquidated rapidly with minimal adverse price effect.
8. The EBA is mandated under Article 38(5), in cooperation with ESMA and the ECB, to develop draft regulatory technical standards (RTS) specifying those highly liquid financial instruments and concentration limits, for which the EBA shall take into account (i) the various types of assets that can be referenced by an asset-referenced token; (ii) the correlation between the assets referenced by the asset-referenced token and the highly liquid financial instruments the issuers may invest in; (iii) the definition and specifications of the liquidity coverage requirement; (iv) concentration limits in the UCITs framework for the purposes of preventing the issuer from investing in highly liquid financial instruments issued by a single entity more than a certain percentage of the reserve of assets and (v) constraints on concentration of tokens by custodians belonging to the same group.
9. For the development of these RTS, the EBA builds on the 2022 Basel standards on the prudential treatment of crypto assets exposures as well as on the new international regulatory developments, as well as the UCITs Directive 2009/65 and the Commission Delegated Regulation (EU) 2015/61 (LCR Delegated Regulation) as envisaged in Regulation (EU) 2023/1114.
10. The consultation of these RTS on the definition of the reserve of assets under Article 38(5) Regulation (EU) 2023/1114 is being undertaken in parallel to other two consultations on liquidity related aspects of issuers of tokens, i.e. the RTS for the definition of liquidity requirements envisaged in Article 36(4) Regulation (EU) 2023/1114 and the RTS for the specification of the content of the liquidity management policy and procedures under Article 45(7)(b) Regulation (EU) 2023/1114.

### 3.1 Liquidity related risks of issuers of ARTs and EMTs

11. As established in Articles 49 and 39, EMTs and ARTs holders can request redemption of the tokens at any time, including stress scenarios, against the reserve assets. In the case of EMTs, the redemption shall be at par value by paying in funds the monetary value of the EMT. In the case of ARTs, redemption shall be made by the issuer either by paying an amount in funds equivalent to the market value of the assets referenced or by delivering the assets referenced by the ARTs. Where issuers of ARTs accepted a payment in funds in an official currency when selling the token, then they shall always provide the option to redeem the token in funds denominated in the same official currency.
12. The said ARTs and EMTs issuers are thus required to maintain a pool of assets by which the tokens maintain a stable value, relative to the asset or assets they reference.
13. Article 36(1)(b) clarifies that the composition of the reserve of assets shall aim to cover the liquidity risks associated to the permanent redemption rights of the token holders.

### **3.1.1 Liquidity risks related to the reserve assets. Redemption of tokens and financial stability.**

14. The composition and management of the reserve of assets are of key importance to ensure that the reserve assets can be liquidated rapidly at or close to prevailing market prices.
15. Obstacles to a prompt access to the reserve of assets, like deterioration in the solvency profile of the banks holding issuers' deposits, or negative volatility of the highly liquid financial instruments in the reserve of assets, challenge the stability of the market value of the tokens with subsequent potential large-scale redemption requests. This in turn may result in "fire sales" of reserve assets challenging the stabilization mechanism and causing losses that could make the reserve assets insufficient relative to the liabilities and even deteriorate the own funds of the issuers.
16. Massive fire sales could negatively impact the markets in which the high liquid financial instruments are traded. A large redemption request of tokens, in particular in the case of market wide stress events, with a high concentration of the reserve assets as deposits with banks, could prompt a massive run of these deposits causing a deterioration of the liquidity profile of the affected banks and a loss of confidence in the general banking system.
17. Furthermore, such situation could impair user confidence in the resilience of the token as a payment mechanism.
18. The ability to sell reserve assets in large volume at (or close to) prevailing market prices would depend on the market depth firstly and then on quality, liquidity and concentration of the reserve assets. The degree of transparency as to the nature and liquidity of these reserve assets might also affect confidence in the token.

### **3.1.2 Liquidity risks related to the DLT infrastructure**

19. DLT failure, including issues regarding the validation of users' ownership and transfer of tokens, or the lack of network capacity to validate large volumes of transactions might cause users' loss of confidence, and trigger redemption requests. Disruption to the mechanism that links the value of the token and the value of its reserves, for example a cyber-incident, entailing a value mismatch between reserve assets and crypto assets could also be a source of liquidity risk.

### **3.1.3 Custody of the reserve assets**

20. Potential uncertainties regarding the terms under which the assets can be transferred to the token holders/issuers or liquidated on the market, legal impediments (e.g. in case of regulators take-over of the custodian) or conflict of interest between the custodian-issuer versus holder of the token (if the valuation of the reserve assets does not reflect its market value) can be a source of liquidity risks for the tokens issuers.

## 3.2 Draft regulatory technical standards specifying the highly liquid financial instruments

21. The EBA is mandated to take into account the following specific aspects for the definition of highly liquid financial instruments in the reserve of assets.

### 3.2.1 Definition of liquid assets in the LCR vs Definition of highly liquid financial instruments in the reserve of assets

22. Article 38(5) refers to ‘financial instruments’ that can be highly liquid. The EBA follows the legal definition of ‘financial instruments’. Directive 2014/65/EU on markets in financial instruments (MIFID II) refers in Section C of Annex I to ‘Financial instruments’ including basically transferable securities, money market instruments, units in collective investment undertakings (CIUs) and derivatives. Similarly point 50 of Article 4 of the CRR defines ‘financial instrument’ as the following mainly: a cash instrument or a primary financial instrument. Furthermore, those established as such in MIFID, contracts that give rise to both a financial asset of one party and a financial liability or equity instrument of another party and derivatives, as long as their value is derived from the price of an underlying financial instrument or another underlying item, a rate, or an index.

23. The EBA takes into account the definition of financial instrument in the specification of highly liquid financial instruments.

24. When specifying the highly liquid financial instruments, as mandated in Article 38(5), the EBA shall take into account “(c) the liquidity coverage requirement as referred to in Article 412 of Regulation (EU) No 575/2013 and as further specified in Commission Delegated Regulation (EU) 2015/61”.

25. The Commission Delegated Regulation (EU) 2015/61 (LCR DR) provides definitional criteria to identify specific categories of assets that could be considered liquid assets in the liquidity coverage ratio if they meet specific general and operational requirements. Liquid assets in the LCR are ready to be liquidated immediately at any point in time, including under stress scenarios, and with no or low loss of market value. Their characteristics serve as the basis for the definition of the eligible highly liquid financial instruments in the issuer’s reserve assets. Highly liquid financial instruments in the reserve assets aim to meet similar targets under similar conditions and scenarios, i.e. to cover payment of obligations in a prompt manner in the short term, including stress scenarios, with no or low loss of value.

26. The EBA considers that highly liquid financial instruments in the reserve of assets need to overall meet the general and operational requirements as envisaged in Articles 7 and 8 of LCR DR with some specificities.

27. In the cases of EMTs as well as in the case of ARTs where the assets referenced are official currencies, highly liquid financial instruments in the reserve of assets are capped due to the



minimum required amount of reserve of assets to be held as deposits with banks, as opposed to the uncapped amount of sovereign bonds in the LCR liquidity buffer. Due to this implicit cap, the EBA considers that in these cases sovereign bonds should not be exempted from the requirements to have a market value that is public or easy to determine, to be listed on a recognized exchange or tradable on generally accepted repurchase markets, to be diversified and subject to a minimum monetisation on an annual basis. Due to the limitation already imposed on highly liquid financial instruments, the definition of eligible sovereign exposures here should be reinforced, and thus not benefit from the exemptions in the LCR. In the LCR the uncapped amount might cover concerns about compliance with those requirements.

28. Full currency matching between the reserve of assets and the assets referenced is referred to by Regulation (EU) 2023/1114. Articles 39(2) and 49(4) Regulation (EU) 2023/1114 establish that issuers of ARTs shall always provide the possibility to redeem the token in funds denominated in the same official currency as the one in which they accepted the payment when selling the token and where issuers of EMTs shall redeem the token at par value paying in funds the monetary value of the EMT. This general one to one currency matching between the reserve of assets and the liabilities against token holders is complemented by a second layer currency consistency requirements between the bank deposits in the reserve of assets and the assets referenced in Articles 36(4d) and 45(7)(b). Therefore, no reference to operational requirements in the LCR related to currency consistency needs to be envisaged for the highly liquid financial instruments in the reserve of assets.
29. Article 38(5) requires highly liquid financial instruments to have minimal market risk, credit risk and concentration risk. Haircuts reflect credit and liquidity risk of liquid assets in the LCR as illustrated by Article 418(1) CRR. The Basel standards on the LCR refers to the haircuts to compensate for market, credit and liquidity risk. Caps on specific liquid assets in the LCR liquidity buffer represent limits for assets of lower quality. Considering the required minimal credit risk and market risk, minimum volatility and maximum price stability, including under stress, the EBA considers that the highest quality liquid assets in the LCR, i.e., 0% haircut and uncapped level 1 assets, seem to be the most appropriate category of assets to be included as eligible highly liquid financial instruments only. This basically includes financial instruments in the form of sovereign bonds, regional government/local authorities/PSE bonds that are assimilated to sovereign bonds, central bank assets, promotional bonds and bonds issued by multilateral development banks and by other specific international organizations. Minimal concentration risk is addressed in the mandate to set concentration limits by issuer.
30. In addition to this the EBA considers that level 1 extremely high-quality covered bonds in the LCR should be included as highly liquid financial instruments in the reserve of assets, capped at 35% of the reserve of assets (please see section 5.1 of this consultation paper on the impact assessment). This is in order to ensure that issuers of tokens referenced to official currencies other than EUR can meet the minimum required amount of reserve of assets considering their limited access to only one issuer of level 1 government bonds in the LCR as well as taking into account the required currency matching between the reserve of assets and the assets referenced and concentration limits by issuer following the mandate to the EBA.

31. As established in paragraph 2 of Article 38 units in UCITs are considered highly liquid financial instruments if the UCIT invests solely in highly liquid financial instruments as defined in these RTS and the issuer of the token still ensures that the concentration risk of the reserve of assets is minimal.

a. **Unwinding collateral swaps, repos and reverse repos in the definition of highly liquid financial instruments**

32. Before the application of the unwinding mechanism, the issuer of tokens should generally reflect the following items in the reserve of assets (mainly as long as related to securities financing transactions):

- The highly liquid financial instruments that are expected to be available at any time, including on day zero. This excludes those pledged and encumbered in repos or collateral swaps. This is consistent with the LCR treatment of HQLA, that should be available at any time during the 30-day time horizon.
- The deposits with banks that can be used. This is consistent with the LCR treatment of inflows/outflows from deposits during the 30-day time horizon.

33. Unwinding short-term collateral swaps, repos and reverse repos seeks to cover the risk of computing in the banks' LCR or in the reserve of assets of tokens' issuers collateral received under securities financing transactions that will be paid out in the short term. It ultimately targets to avoid any overestimate of the LCR or of the reserve of assets.

34. The unwinding mechanism in the LCR consists of considering the cash and collateral in/outflows upon maturity of the transactions in the short term for the purposes of computing the HQLA caps only. Thus, level 1 HQLA available at present should not be impacted in theory. However, in the LCR inflows/outflows apply and take into account the flows of cash/collateral of these transactions in the short term.

35. The unwinding mechanism proposed in these draft RTS is for the purposes of both the computation of the reserve of assets itself and for the caps. This is in order to take into account the risk that is covered in the LCR by inflows/outflows. The reserve assets, including cash/deposits or highly liquid financial instruments, count only as long as available at the end of the short-term time horizon considered, on which the unwinding applies. Thus, it takes into account the resources available at inception plus the incoming/outcoming of cash/collateral during the time horizon. In summary the unwinding of securities financing transactions in the reserve of assets includes the impact of the inflows/outflows recognised in the LCR.

36. In summary the following adjustments need to be considered in the unwinding of securities financing transactions for the computation of the reserve of assets of the issuer of tokens. To be noted that haircuts do not apply here (please see paragraph 57).

- Reverse repos - collateral eligible in the reserve of assets: unwinding = - **market value of collateral + cash leg**
- Reverse repos - collateral is not eligible in the reserve of assets: unwinding = + **cash leg**
- Repos – collateral is eligible in the reserve of assets: unwinding = + **market value of collateral – cash leg**
- Repos – collateral is not eligible in the reserve of assets: unwinding = - **cash leg**
- *Collateral swap – collateral received and lent are eligible in the reserve of assets = + market value of collateral to be received – market value of collateral to be paid out*
- *Collateral swap – collateral received and lent are not eligible in the reserve of assets = no unwinding*
- *Collateral swap – collateral received is eligible in the reserve of assets and lent is not eligible in the reserve of assets = - market value of collateral to be paid out*
- *Collateral swap – collateral received is not eligible in the reserve of assets and lent is eligible in the reserve of assets = + market value of collateral to be received*

### Time horizon

37. The EBA has assessed the determination of the time horizon for the unwinding. Short term definition should be in line with Regulation (EU) 2023/1114. It is, thus, understood the time by which the liquid assets should be available.

38. Article 36(a) and (b) Regulation (EU) 2023/1114 focuses on the liquidity resources up to the following 5 working days as “survival period” like for immediate effectiveness of the reserve of assets. The assumption is that the liquidity stress here might be expected to happen much more quickly and profoundly than in the banking business.

39. There are some drawbacks in considering a time horizon larger than 5 days for the unwinding. Liquid assets that would be available during the following 5 days, that Regulation (EU) 2023/1114 seems to consider in the reserve of assets, would be underestimated. For example this is the case of 15 days collateral swaps where liquid assets have been received in exchange of non-liquid assets. At the same time, there is an overestimation of the liquidity resources only available beyond 5 working days if for example a reverse repo maturing in 15 days collateralised by non-liquid assets is included.

### Other aspects

40. The amount of the reserve of assets, after unwinding the relevant securities financing transactions, should be considered for the purposes of the 35% cap in covered bonds (please

see section 5.1 of this consultation paper on the impact assessment), the minimum percentages of the reserve of assets maturing up to 1 or 5 working days (please see the draft RTS to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114) and for the concentration limits of highly liquid financial instruments by issuer (please see section 3.2.2 of this consultation paper) and of deposits by counterparty (please see the draft RTS to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114).

### **3.2.2 Concentration limits of investments by UCITs (undertakings for collective investment in transferable securities)**

41. When specifying the highly liquid financial instruments, as mandated in point (d) of Article 38(5), the EBA shall take into account “(i) *constraints on concentration preventing the issuer from investing more than a certain percentage of reserve assets in highly liquid financial instruments with minimal market risk, credit risk and concentration risk issued by a single entity.*” For these purposes “EBA shall devise suitable limits to determine concentration requirements. Those limits shall take into account, amongst others, the relevant thresholds laid down in Article 52 of Directive 2009/65/EC”.
42. The EBA takes into account the references in Regulation (EU) 2023/1114 to UCITs and the similarities in risks and activities between them and ART/EMT issuers and considers the concentration limits that should apply to highly liquid financial instruments in the form of securities in the reserve of assets as concentration requirements by issuer.
43. The UCITs framework envisages a general concentration limit of 5% of their investments for securities issued by the same issuer. This limit is envisaged to be able to be increased up to 25%, in the case of covered bonds, and to 35% for the cases of, generally, government bonds. For exposures to OTC derivatives, the UCITs framework envisages a concentration limit with the same counterpart of 10%, if it is a credit institution, or 5% otherwise.
44. The EBA is proposing the 35% limit for government bonds and a 10% limit for covered bonds. This is in order to ensure that issuers of tokens referenced to assets denominated in currencies other than EUR can meet the minimum necessary reserve of assets considering generally a single issuer of government bonds in the same currency, full currency matching requirement between reserve of assets and assets referenced and, in some case, potentially a limited number of covered bonds issuers.
45. A look through approach is envisaged for the assessment of compliance with the concentration limit when it comes to units in UCITs or in CIUs as highly liquid financial instruments.
46. The EBA proposes also the inclusion of the concentration limit by counterparty in the OTC derivatives for the unmargined part of them. The margins provided are considered to mitigate the remaining risk.

### **3.2.3 The various types of assets that can be referenced by ARTs and correlation between the assets referenced by the ARTs and the reserve assets**

47. When specifying the highly liquid financial instruments, as mandated in Article 38(5), the EBA shall take into account *“(a) the various types of assets that can be referenced by an asset-referenced token;”*. Furthermore, the EBA shall take into account *“(b) the correlation between those assets referenced by the asset-referenced token and the highly liquid financial instruments the issuers may invest in;”*.
48. REGULATION (EU) 2023/1114 refers to ‘electronic money token’ or ‘e-money token’ as a type of crypto-asset that purports to maintain a stable value by referencing the value of one official currency.
49. REGULATION (EU) 2023/1114 refers to ‘asset-referenced tokens’ aiming at maintaining a stable value by referencing any other value or right, or combination thereof, including one or several official currencies.
50. Regulation (EU) 2023/1114 allows for the widest possible set of types of assets that can be referenced by ARTs, including commodities, financial instruments or crypto-assets.
51. The market value of the reserve assets held by the issuer needs to fully cover the amount of the liabilities against the token holders which are pegged to the market value of the assets referenced.
52. The EBA considers that mitigating the risk of any difference between the volatility of the market value of the asset referenced and the volatility of the market value of the reserve of assets should be a key factor in the determination of the composition of the reserve of assets to ensure that their amount is always at least equal to the amount of the liability towards the token holder. This is linked to a minimum correlation between the market value of the reserve of assets and the market value of the assets referenced.
53. In the case of EMTs or ARTs referenced to official currencies, a sufficient correlation between the reserve assets and assets referenced is reasonably expected since Regulation (EU) 2023/1114 envisages the reserve of assets to be held as bank deposits in the proportion of assets referenced. The rest of the reserve of assets is proposed to be composed of assets with low volatility, i.e. 0% LCR haircut liquid assets and level 1 extremely high quality covered bonds.
54. In the case of ARTs referencing assets other than official currencies (e.g. commodities, financial instruments or crypto-assets), the EBA considers that by allowing these referenced assets and derivatives relating to them, covering market value changes between the assets referenced and the reserve assets, as highly liquid financial instruments, a minimum correlation between their market value and subsequent mitigation of the de-pegging risk is expected to be achieved. This is in addition to the fact that the issuer may keep the assets received when selling the ARTs (e.g. commodities) and not invest them in highly liquid financial instruments.

55. At the same time the EBA understands that introducing volatility in the amount of reserve of assets via the inclusion of volatile assets in the definition of highly liquid financial instruments might bring volatility in the market value of the ARTs that might ultimately result in a massive redemption request. This would lead to liquidity risks for the issuer, bank deposits counterparties, as well as generally financial markets due to fire sales including the banking system and crypto-assets markets.
56. Therefore, the EBA proposes the eligibility of the referenced assets, if financial instruments, or of financial instruments relating to them<sup>7</sup> in the definition of highly liquid financial instruments in the reserve of assets but without setting a minimum or maximum value for it. With this, the EBA also seeks to ensure a good balance between the Regulation (EU) 2023/1114 expectation to taken into account for these purposes the definition of liquid assets in the LCR while seeking a minimum correlation between the reserve assets and the assets referenced. Still, the EBA expects that the referenced assets that are included in the reserve of assets meet the operational and general requirement as for liquid assets in the LCR, e.g. unencumbered, readily available and without any impediments for their liquidation.
57. The EBA proposes to not apply regulatory haircuts to the highly liquid financial instruments for simplicity reasons and since the risk covered by them is addressed via a minimum overcollateralisation of the assets referenced as proposed in the draft RTS to further specify the liquidity requirements of the reserve of assets under Article 36(4) Regulation (EU) 2023/1114.
58. With the inclusion of the referenced assets in the definition of highly liquid financial instruments within the reserve of assets, the 5% concentration limit by issuer in the UCITs framework should apply for the cases of those financial instruments in the form of securities.

### **3.2.4 Concentration limits of ARTs in custody with entities within the same group**

59. When specifying the highly liquid financial instruments, as mandated in Article 38(5), the EBA shall take into account *“(cd) constraints on concentration, preventing the issuer from holding in custody more than a certain percentage of crypto-assets or assets with crypto-asset service providers or credit institutions which belong to the same group, as defined in Article 2, point (11), of Directive 2013/34/EU of the European Parliament and of the Council or investment firms.”*
60. Article 37(1)(e) establishes that concentration in the custodians of reserve assets needs to be avoided. Recital 55, however, envisages that *“However, in certain situations, this might not be possible due to a lack of suitable alternatives. In such cases, a temporary concentration should be deemed acceptable.”*

It is not part of the EBA mandate to set specific concentration limits on this. However, the EBA proposes that the liquidity management and procedures in place for token issuers envisage specific measures to address this concentration risk. The draft RTS on the specification of the

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<sup>7</sup> For instance an ETF/ETN on gold or a derivative contract on another commodity.

liquidity management policy and procedures in place under Article 45(7)(b), which is in public consultation in parallel to these draft RTS, recalls these expectations in Regulation (EU) 2023/1114 and addresses this issue.

## 4. Draft regulatory technical standards

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## COMMISSION DELEGATED REGULATION (EU) .../...

of **XXX**

**supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards for specifying the highly liquid financial instruments with minimal market risk, credit risk and concentration risk**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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<sup>8</sup>, and in particular Article 38(5), fourth subparagraph, thereof,

Whereas:

- (1) For the purpose of allowing investment in highly liquid financial instruments having minimal market, credit and concentration risk, as envisaged in Article 38(1) of Regulation (EU) 2023/1114, level 1 liquid assets subject to 0% haircut according to Commission Delegated Regulation (EU) 2015/61 of 10 October 2014<sup>9</sup> should be included as highly liquid financial instruments in the reserve of assets of a token issuer.
- (2) In the identification of the highly liquid financial instruments having minimal market, credit and concentration risk, it is necessary to take in to account the following requirements set out in Regulation (EU) 2023/1114: (i) the required currency matching between the denomination of the reserve of assets and the assets-referenced by the tokens; (ii) a minimum required amount of 30% of deposits with credit institutions, denominated in the official currency referenced by tokens that are not significant; and (iii) the concentration limits by issuer referred to in the prudential framework applicable to undertakings for collective investment in transferable securities (UCITS). Based on these aspects, it is necessary to include level 1 liquid assets in the form of extremely high quality covered bonds as referred to in Delegated Regulation (EU) 2015/61 as highly liquid financial instruments, up to 35% of the value of the reserve of assets, so as to ensure that the requirements on highly liquid financial instruments can be met while ensuring that the market, credit and concentration risk of the reserve of assets remain low.
- (3) In the determination of the highly liquid financial instruments, it is necessary to take into account the expected higher volatility of the assets referenced by the tokens, when

<sup>8</sup> OJ L 150, 9.6.2023, p. 40.

<sup>9</sup> 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 11, 17.1.2015, p. 1).

they are not referenced to official currencies. Therefore, in order to allow maintaining a higher correlation between the value of the assets referenced and the value of the reserve of assets, the specific financial instruments referenced by the tokens or derivatives relating to the assets referenced by the tokens should be included in the reserve of assets as highly liquid financial instruments. This higher correlation is necessary to mitigate the potential mismatch in market and credit risk between the assets referenced and the reserve of assets.

- (4) As in the determination of the LCR liquidity buffer in accordance with Delegated Regulation (EU) 2015/61, an unwinding mechanism for secured funding, secured lending or collateral swap transactions should be envisaged for the determination of the amount of the reserve of assets.
- (5) Overall, the general and operational eligibility requirements for liquid assets set out in Delegated Regulation (EU) 2015/61 should apply also for the highly liquid financial instruments in the reserve of assets. However, some exceptions should be envisaged to adapt the applicable framework to the specificities of the crypto-activity and to the specific requirements in Regulation (EU) 2023/1114. For example, the requirement that issuers of high quality liquid assets in Delegated Regulation (EU) 2015/61 have not to belong to the financial sector should not apply to issuers of highly liquid financial instruments. In addition, Regulation (EU) 2023/1114 requires the currency matching between the denomination of the reserve of assets and the denomination of the assets referenced by the tokens. Furthermore, some exemptions to the general and operational requirements applicable to some level 1 liquid assets subject to 0% haircut in accordance with Delegated Regulation (EU) 2015/61 should not be replicated in the framework applicable to highly liquid financial instruments, to take into account the quantitative limits set out in Regulation (EU) 2023/1114 to their inclusion in the reserve of assets.
- (6) The market value of the highly liquid financial instruments should be calculated considering the cash-inflows and outflows that would derive from derivatives hedging not only their market risk, including interest rate risk or currency risk, but also the difference between the market value of the highly liquid financial instruments and the market value of the assets referenced. This is particularly relevant for the case of tokens that are not referenced to official currencies, which might be expected to be more volatile.
- (7) As mandated by Regulation (EU) 2023/1114, specific concentration limits by issuer of highly liquid financial instruments should be provided, taking into account the prudential framework applicable to UCITS. Therefore, it is necessary to introduce a general 5% limit for securities and crypto-assets, a 35% limit for level 1 liquid assets with 0% haircut, as referred to in Delegated Regulation (EU) 2015/61, and a 10% limit in the cases of level 1 liquid assets consisting in extremely high quality covered bonds as referred to in that Delegated Regulation.
- (8) The definition of the highly liquid financial instruments with minimal market risk, credit risk and concentration risk should also take into account the developments of the work in the BCBS framework to identify the eligible reserve assets for crypto-activities.

- (9) Considering that requirements set out in Article 38 of Regulation (EU) 2023/1114 shall also apply to electronic money institutions issuing e-money tokens (either significant or, where decided, non-significant), as per Article 58(1), point (a), and (2) of that Regulation, this Regulation should also apply to those tokens that are subject to or required to comply with those requirements.
- (10) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Banking Authority.
- (11) The European Banking Authority, in cooperation with the European Supervisory Authority (ESMA) established by Regulation (EU) No 1095/2010 of the European Parliament and of the Council<sup>10</sup> and with the European Central Bank, has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010 of the European Parliament and of the Council,<sup>11</sup>

HAS ADOPTED THIS REGULATION:

### *Article 1*

#### *Definition of highly liquid financial instruments*

1. For the purposes of Article 38(1) of Regulation (EU) 2023/1114, financial instruments shall be considered highly liquid financial instruments with minimal market risk, credit risk and concentration risk where they comply with all of the following:
  - (a) they comply with the general requirements laid down in Article 7 of Commission Delegated Regulation (EU) 2015/61;<sup>12</sup>
  - (b) they comply with the operational requirements laid down in Article 8 of Delegated Regulation (EU) 2015/61;
  - (c) they belong to one of the following categories of financial instruments:
    - (i) level 1 assets referred to in Article 10 of Delegated Regulation (EU) 2015/61 that are not subject to any haircut;
    - (ii) level 1 assets qualifying as exposures in the form of extremely high-quality covered bonds, as referred to in Article 10(1), point (f), of

<sup>10</sup> 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 (OJ L 331, 15.12.2010, p. 84).

<sup>11</sup> 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).

<sup>12</sup> 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).

Delegated Regulation (EU) 2015/61, up to 35 % of the value of the reserve of assets;

- (iii) where the tokens are not referenced to official currencies, other financial instruments that are either assets referenced by the tokens or derivatives relating to the assets referenced by the tokens.

For the purposes of the first subparagraph, point (a), the provision in Article 7(7), point (aa), of Delegated Regulation (EU) 2015/61 shall not apply.

For the purposes of the first subparagraph, point (b):

- (a) the operational requirements for credit institutions in Article 8 of Delegated Regulation (EU) 2015/61 shall be read as referred to the [relevant] issuers of tokens;
- (b) Article 8(1), second subparagraph, points (a)(iii) and (b), and Article 8(6) of Delegated Regulation (EU) 2015/61 shall not apply;
- (c) Article 8(4), second subparagraph, of Delegated Regulation (EU) 2015/61 shall not apply with respect to assets referred to in Article 10(1), points (c) to (e) and (g), of that Regulation.

For the purposes of the first subparagraph, point (c)(iii), and without prejudice to the second subparagraph, where crypto-assets that qualify as financial instruments, as referred to in Article 2(4), point (a), of Regulation (EU) 2023/1114, are included in the reserve of assets:

- (a) all reference to credit institutions in Article 7(3) of Delegated Regulation (EU) 2015/61 shall be read as referred to the issuers of the token that hold the reserve assets;
- (b) Article 7(4) of Delegated Regulation (EU) 2015/61 shall not apply [to those crypto-assets].

For the purposes of the first subparagraph, point (c)(iii), where financial instruments that qualify as derivatives are included in the reserve of assets:

- (a) subparagraph 1, points (a) and (b), shall not apply to those derivatives;
- (b) those derivatives shall be taken into account for the purposes of Article 2 of this Regulation.

2. For the purposes of computing the market value of the reserve of assets, haircuts provided by Articles 10 to 19 of Delegated Regulation (EU) 2015/61 shall not apply.

## *Article 2*

### *Hedging derivatives to highly liquid financial instruments*

The net liquidity outflows and inflows that would result in the event of an early close-out of the hedge, including derivatives hedging the difference between the change of the market value of reserve assets and the change of the market value of the assets referenced by the token, shall be taken into account in the valuation of the highly liquid financial instruments.

## *Article 3*

### *Concentration limit by issuer of highly liquid financial instruments*

1. The market value of highly liquid financial instruments with minimal market risk, credit risk and concentration risk, as referred to in Article 38(1) of Regulation (EU) 2023/1114, issued or guaranteed by a single entity or by entities with close links shall not be higher than:
  - (a) 35% of the market value of the reserve of assets, in the case of securities or money market instruments that are not subject to any haircuts in accordance to Articles 10 to 19 of Delegated Regulation (EU) 2015/61;
  - (b) 10% of the market value of the reserve of assets, in the case of extremely high quality covered bonds as referred to in Article 10(1), point (f), of Delegated Regulation (EU) 2015/61;
  - (c) 5% of the market value of the reserve of assets, in the case of other securities, money market instruments or crypto-assets that qualify as financial instruments, as referred to in Article 2(4), point (a), of Regulation (EU) 2023/1114.
2. The risk exposure to a counterparty in an OTC derivative transaction that is unmargined shall not exceed:
  - (a) 10% of the market value of the reserve of assets, when the counterparty is a credit institution; or
  - (b) 5% of the market value of the reserve of assets, in all other cases.
3. When applying paragraphs 1 and 2, token issuers shall look through to the underlying exposures of collective investment undertakings (CIUs), as defined in Article 4(1), point (7), of Regulation (EU) No 575/2013, whose units are included in the reserve of assets.

#### Article 4

##### Unwind mechanism

1. Issuers of asset-referenced tokens and/or, where applicable, e-money institutions issuing e-money tokens shall apply the approach set out in paragraph 2 to all of the following:
  - (a) the determination of the amount of the reserve of assets envisaged in Article 36(1) of Regulation (EU) 2023/1114;
  - (b) the application of the percentages of the reserve of assets with maximum maturities established in **[Article 1 and Article 2 of the RTS to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114]**;
  - (c) the application of the concentration limits by deposit counterparty established in **[Article 5 of the RTS to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114]**;
  - (d) the application of the concentration limits by issuer of highly liquid financial instruments established in Article 3.

The approach set out in paragraph 2 to the determination referred to in the first subparagraph, point (a), shall apply without prejudice to the application of the operational requirements set out in Article 1(1), first subparagraph, point (b), and the 35 % cap to covered bonds, as referred to in Article 1(1), first subparagraph, point (c)(ii).

2. The issuers of asset-referenced tokens and/or, where applicable, e-money institutions issuing e-money tokens shall consider the impact on the reserve of assets of the termination of secured funding, secured lending or collateral swap transactions entered into using reserve assets on at least one leg of the transaction, where the transaction matures within 5 working days.

The reserve of assets shall be adjusted with an increase of its value, by an amount equivalent to the market value of the cash or other reserve assets to be received at the maturity of the transactions referred to in the first subparagraph, and with a decrease of its value, by an amount equivalent to the market value of the cash or other reserve assets to be posted at the maturity of those transactions.

**Example 1:** 3 days (or 15 days for LCR for example) 100 EUR reverse repo and collateral are sovereign bonds.

Before reverse repo	After reverse repo	After unwinding (amount computable for the reserve of assets)	LCR
Cash: 100	Cash: 0 Sovereign bonds: 100	Cash: $0 + 100 = 100$ Sovereign bonds: $100 - 100 = 0$	Sovereign bonds: 100 Inflow: 0

Liquidity resources after unwinding the reverse repo in the reserve of assets = Cash (100)

Liquidity resources after unwinding the reverse repo in the LCR = Sovereign bonds (100)

**Example 2:** 3 days (or 15 days for LCR for example) 100 EUR reverse repo and collateral is not liquid.

Before reverse repo	After reverse repo	After unwinding (amount computable for the reserve of assets)	LCR
Cash: 100	Cash: 0 Liquid collateral: 0	Cash: $0 + 100 = 100$ Liquid collateral: $0 - 0 = 0$	Liquid collateral = 0 Inflow = 100

Liquidity resources after unwinding the reverse repo in the reserve of assets = Cash (100)

Liquidity resources after unwinding the reverse repo in the LCR = Inflows (100)

**Example 3:** 3 days (or 15 days for LCR for example) 100 EUR repo and collateral are sovereign bonds.

Before repo	After repo	After unwinding (amount computable for the reserve of assets)	LCR
Sovereign bonds: 100	Cash: 100 Sovereign bonds: 0	Cash: $100 - 100 = 0$ Sovereign bonds: $0 + 100 = 100$	Cash: 100 Outflow: 0

Liquidity resources after unwinding the repo in the reserve of assets = Sovereign bonds (100)

Liquidity resources after unwinding the repo in the LCR = Cash (100)

**Example 4:** 3 days (or 15 days for LCR for example) 100 EUR repo and collateral is not liquid.

Before repo	After repo	After unwinding (amount computable for the reserve of assets)	LCR
Liquid collateral: 0	Cash: 100 Liquid collateral: 0	Cash: $100 - 100 = 0$ Liquid collateral: $0 + 0 = 0$	Cash = 0 Outflow = 100

Liquidity resources after unwinding the repo in the reserve of assets = 0

Liquidity resources after unwinding the repo in the LCR = Cash (100) – Outflows (100) = 0



**Example 5:** 3 days (or 15 days for LCR for example) 100 EUR collateral swap (collateral given is not liquid and collateral received is liquid).

Before swap	After swap	After unwinding (amount computable for the reserve of assets)	LCR
Liquid collateral: 0	Liquid collateral: 100	Liquid collateral: 100 - 100 = 0	Liquid collateral = 100 Outflow = 100

Liquidity resources after unwinding the swap in the reserve of assets = 0

Liquidity resources after unwinding the swap in the LCR = liquid collateral (100) – Outflows (100) = 0

**Example 6:** 3 days (or 15 days for LCR for example) 100 EUR collateral swap (collateral given is liquid and collateral received is not liquid).

Before swap	After swap	After unwinding (amount computable for the reserve of assets)	LCR
Liquid collateral: 100	Liquid collateral: 0	Liquid collateral: 0 + 100 = 100	Liquid collateral = 0 Inflow = 100

Liquidity resources after unwinding the swap in the reserve of assets = 100

Liquidity resources after unwinding the swap in the LCR = liquid collateral (0) + Inflows (100) = 100

**Example 7:** 3 days (or 15 days for LCR for example) 100 EUR collateral swap (collateral given and received are liquid).

Before swap	After swap	After unwinding (amount computable for the reserve of assets)	LCR
Liquid collateral:100	Liquid collateral: 100	Liquid collateral: 100 + 100 – 100 = 100	Liquid collateral = 100 Inflow/Outflow = 0

Liquidity resources after unwinding the swap in the reserve of assets = 100

Liquidity resources after unwinding the swap in the LCR = liquid collateral (100) + Inflows (0) – Outflows (0) = 100

**Example 8:** 3 days (or 15 days for LCR for example) 100 EUR collateral swap (collateral given and received are not liquid).

Before swap	After swap	After unwinding (amount computable for the reserve of assets)	LCR
Liquid collateral:0	Liquid collateral: 0	Liquid collateral: 0 + 0 – 0 = 0	Liquid collateral = 0 Inflow/Outflow = 0

Liquidity resources after unwinding the swap in the reserve of assets = 0

Liquidity resources after unwinding the swap in the LCR = liquid collateral (0) + Inflows (0) – Outflows (0) = 0

**Example 9: Unwinding and calculation of limits.**

Reserve of assets before unwinding: 500	Reserve of assets after unwinding: 397
-Deposit with bank A: 50 (10%)	-Deposit with bank A: 50 (13%)
-Deposit with bank B: 50 (10%)	-Deposit with bank B: 50 + 47 (unwinding the reverse repo): 97 (24%)
-Deposit with bank C: 50 (10%)	-Deposit with bank C: 50 (13%)
-Sovereigns A: 150 (30%)	-Sovereigns A: 150 – 100 (unwinding collateral swap): 50 (13%)
-Sovereigns B: 100 (20%)	-Sovereigns B: 100 (26%)
-Covered bonds A: 50 (10%)	-Covered bonds A: 50 (13%)
-Covered bonds B: 50 (10%)	-Covered bonds B: 50 – 50 (unwinding the reverse repo): 0
<p><u>Additional information on the composition of the reserve of assets:</u></p> <p>- Sovereigns A by 100 were received in a collateral swap where non-liquid assets were posted.</p> <p>- Covered bonds B by 50 were received in a reverse repo where cash by 47 was posted from deposits B.</p>	

Limits, to be applied after the unwinding:

- Concentration deposit A: **13%**, larger than the maximum 10%<sup>13</sup> by deposit counterparty.
- Concentration deposit B: **24%**, larger than the maximum 10% by deposit counterparty.
- Concentration deposit C; **13%**, larger than the maximum 10% by deposit counterparty.

<sup>13</sup> Assuming that bank A is a large institution and following Article 5 of the [draft to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114]

- Concentration Sovereign A: 13%, lower than the maximum 35% by issuer.
- Concentration Sovereign B: 26%, lower than the maximum 35% by issuer.
- Concentration covered bonds A: **13%**, larger than the maximum 10% by issuer.
- Covered bonds A and B: 13%, lower than the 35% cap.

***The issuer would need to diversify deposits to not exceed the 10% limit by counterparty while reducing covered bonds A exposures to max 10% by counterparty.***

#### *Article 5*

#### *Entry into force*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

*For the Commission  
The President*

*[For the Commission  
On behalf of the President  
[Position]*

## 5. Accompanying documents

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### 5.1 Draft cost-benefit analysis / impact assessment

1. As per Article 10(1) and Article 15(1) of Regulation (EU) No 1093/2010 (EBA Regulation), regulatory technical standards (RTS) and implementing technical standards shall be accompanied by an Impact Assessment (IA) which analysis 'the potential related costs and benefits.' This section presents the IA of the main policy options included in this Consultation Paper (CP) the draft RTS on the specification of highly liquid financial instruments, which the EBA is mandated to develop under Article 38(5) of Regulation (EU) 2023/XXX on markets in crypto-assets.
2. Regulation (EU) No 1114/2023 (Regulation (EU) 2023/1114) sets out a new legal framework for issuers of ARTs and EMTs, requiring issuers that invest a part of the reserve of assets to do it in highly liquid financial instruments with minimal market risk, credit risk and concentration risk under Article 38 (1) of REGULATION (EU) 2023/1114. Paragraph 5 of that Article mandates the EBA to specify the financial instruments that can be considered for the purposes of forming part of the reserve of assets as highly liquid and with minimal market risk, credit risk and concentration risk. In that paragraph the EBA is also mandated to devise concentration limits by issuer of highly liquid financial instruments as a maximum percentage of the reserve of assets.

#### 5.1.1 Problem identification and background

3. Article 36(1) of Regulation (EU) 2023/1114 requires issuers of asset-referenced tokens (ARTs), whether they are either if the ARTs are significant ARTs or not, to constitute and maintain a reserve of assets at all times to cover their liabilities against the holders of their issued ARTs matching the risks reflected within these liabilities. The reserve of assets is composed of the assets received when issuing the token holders and by the highly liquid financial instruments the issuer may invest in. In the case of tokens referenced to official currencies, a minimum part of the reserves should be held in the form of deposits in credit institutions (at least 30% of the amount referenced in each official currency if the token is not significant, and at least 60% if the token is significant). Upon redemption requests from token holders, the issuers should be able to liquidate the reserve assets.
4. As established in Article 49 and Article 39, EMTs and ARTs holders can request redemption of the tokens at any time, including stress scenarios, against the reserve assets. Upon redemption requests, the issuers should be able to liquidate the highly liquid financial instruments to fulfil the requests. The way the reserves are invested in will have implications on the overall liquidity risks related to these issuers, and on financial markets due to potential triggering of fire sales. This may in turn have implication on the financial stability as a whole.

### 5.1.2 Policy objective

5. The general objective of the policies in this RTS is to ensure financial stability by limiting the liquidity related risks of the issuers of ARTs and EMTs, that could be triggered by the redemption of tokens.
6. The specific objective of the policies specified in this RTS are to ensure that reserve assets can be liquidated rapidly at or close to prevailing market prices, and that issuers of ARTs and EMTs have a clear view of the instruments that are eligible to be included in their reserve of assets in terms of categories of liquid assets, the general and operational requirements that they need to fulfill, as well as concentration limits.
7. In addition, when developing its mandate the EBA needs to take into account:
  - The specifications of the liquidity coverage ratio.
  - The type of assets that can be referenced by the tokens and the correlation between them and the highly liquid financial instruments.
  - Concentration limits for UCITs under Article 52 of Directive 2009/65/EC.

### 5.1.3 Baseline scenario

8. In a baseline scenario there would be no RTS specifying the highly liquid financial instruments that can be used by issuer of ARTs and EMTs to invest their reserve of assets. As a result, the interpretation of the Regulation (EU) 2023/1114 in this respect would diverge significantly across entities and may lead to significant liquidity risks.

### 5.1.4 Options considered, assessment of the options and preferred options

#### Policy issue 1: Categories of liquid assets in the LCR framework

9. Article 38(1) and (5) refers to financial instruments that can be considered highly liquid. The EBA has assessed the different possible categories of liquid assets in the LCR and has confronted them with the expectations of the highly liquid financial instruments in Regulation (EU) 2023/1114. For its specification the EBA takes into account the definition of financial instruments in point (50) of Article 4 of the CRR in conjunction with Section C of Annex I of MIFID II. Table 1 provides a description of the categories of the liquid assets in the LCR, with additional columns specifying the haircuts and the caps applicable to each category of liquid asset.
10. As stated in Article 418(1) of the CRR, the haircuts applicable to liquid assets in the LCR reflect at least the duration, the credit and liquidity risk and typical repo haircuts in periods of general market stress. The BCBS standard on LCR refer also to the haircuts to cover additional price and market liquidity risks. The haircuts ultimately protect against potential losses in the value of liquid assets when liquidated in stressed conditions.

11. The caps, as maximum amount of the relevant category of liquid assets in the liquidity buffer, are designed to reduce the risk that the liquidity buffer may be comprised of an excessive amount of assets of lower liquidity.

Table 1. Categories of liquid assets in the LCR

Category	Haircut	Cap
Level 1 exposures to central banks, securities issued or guaranteed by central governments, regional governments, local authorities or public sector entities, promotional bonds, securities issued or guaranteed by multilateral development banks and specific international organisations.	0%	None
Level 1 extremely high-quality covered bonds	At least 7%	70% of the liquidity buffer
Level 2A exposures to central banks, securities issued or guaranteed by central governments, regional governments, local authorities or public sector entities, covered bonds, corporate bonds.	At least 15%	Within the total Level 2 cap of 40% of the liquidity buffer
Level 2B securitisations, covered bonds, corporate bonds, shares,	At least between 30% and 50% depending on each asset	Within the total Level 2 cap of 40% of the liquidity buffer plus a Level 2B cap of 15% of the liquidity buffer.

12. With regards to the categories of liquid assets to be included in the reserve of assets, the following options were considered:

13. **Option A:** Only Level 1 0% haircut liquid assets. With this option the reserve of assets of an issuer of a token referenced to an official currency other than EUR would be limited to:

- 0% haircut level 1 HQLA in the LCR as highly liquid financial instruments (35% of the reserve of assets, considering the highest concentration limit by issuer to allow for the largest possible amount of securities taking into account that there is only one issuer of 0% level 1 HQLA generally in non-euro area member states since currency matching between the reserve of assets and the assets referenced is required in Regulation (EU) 2023/1114), and
- Deposits with credit institution (at least 30% of the amount referenced), which would need to reach basically the remaining 65% of the amount of the necessary reserve of assets.

14. **Option B:** Only Level 1 liquid assets (including Level 1 extremely high-quality covered bonds) With this option the reserve of asset would be composed of:

- 0% haircut level 1 HQLA in the LCR as highly liquid financial instruments (35% of the reserve of assets, considering the highest concentration limit by issuer and the fact that there is

only one issuer generally to ensure currency matching between the reserve assets and the assets referenced in the case of non-euro area member states),

- Deposits with credit institution (at least 30% of the amount referenced), and
- Level 1 extremely high-quality covered bonds in the LCR as highly liquid financial instruments by not more than 35% of the reserve of assets.

15. Article 38(1) Regulation (EU) 2023/1114 requires that the highly liquid financial instruments in the reserve of assets have minimal market risk, credit risk and concentration risk with the objective that they can be liquidated rapidly with minimal adverse price effect.

16. With this the EBA considered that level 1 liquid assets in the LCR subject to 0% haircut met the conditions required in Regulation (EU) 2023/1114 as regards minimal market and credit risk and minimal adverse price effect in case of a rapid liquidation (Option A). To ensure a minimal concentration risk a maximum percentage of the reserve of assets is proposed for highly liquid financial instruments that are Level 1 and subject to 0% haircut in the LCR issued by a single entity.

17. In addition, the EBA considered the case of assets referenced to EU official currencies other than EUR. The concern arose as to if and how in these cases issuers might cover the minimum necessary amount of the reserve of assets, with only deposits in credit institutions and 0% level 1 haircut liquid assets as highly liquid financial instruments which would be generally limited to a single central government issuer (to ensure currency matching). Regulation (EU) 2023/1114 mandates the EBA to establish concentration limits by issuer, which in the case of 0% level 1 haircut liquid assets would be between 5% and 35% following the UCITs framework proposed in Regulation (EU) 2023/1114.

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Policy option A (without covered bonds)</b>	<p>Only HQLA of the maximum quality and minimal credit, market and liquidity risk in the LCR are allowed.</p> <p>It is a more straight forward approach and less burdensome since it avoids any complexity in the calculation of the cap of the covered bonds via the unwind mechanism.</p>	<p>It would force issuers in some specific Member States to concentrate a great part of their reserve of assets in deposits with credit institutions with higher credit risk than securities.</p> <p>The direct link with banks via deposits would be much higher meaning that the risk of a stress event to affect the financial stability would be higher in some member states.</p>
<b>Policy option B (with covered bonds)</b>	<p>Allows to hold more securities in the reserve assets rather than deposits with credit institution reducing the credit risk of the reserve assets as a whole.</p>	<p>The scope of definition of highly liquid financial instruments will not be composed of the liquid assets in the LCR with the minimal credit, liquidity and market risk only if a haircuts based approach is taken into account. However, this is controlled with a 35%</p>



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**Advantages**

Reduces the direct link with banks and potential interactions with financial stability in case of stress.

**Disadvantages**

cap and because still this is the second best category of HQLA in the LCR subject to a 7% haircut only in the LCR in addition to the fact that the eligible extremely high quality covered bonds need to meet the general and operational requirements in the LCR.

It introduces the risk of misinterpreting the amount of the reserve of assets since secured lending, secured funding or collateral swap transactions could increase the amount of the covered bonds eligible beyond the maximum 35% temporarily until the close out of the transaction. However, this is controlled with the implementation of the unwind mechanism, similarly to the LCR, for the calculation of the maximum amount of eligible covered bonds.

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18. The EBA has opted for Policy option B. The EBA considered that level 1 extremely high-quality covered bonds are necessary to ensure that all issuers across the EU, irrespective of the official EU currency the assets might be referenced to, have the same opportunities to minimize the risks of their reserve assets and of their financial stability. The EBA considers that the reserve of assets with these covered bonds, which amount is capped to 35% of the reserve of assets, still show a minimal exposure to credit and market risk. The concentration risk of them is controlled also with a maximum amount of bonds being issued by the same entity.

Figure 1. Outstanding amount of government debt securities in the EU (EUR billion)

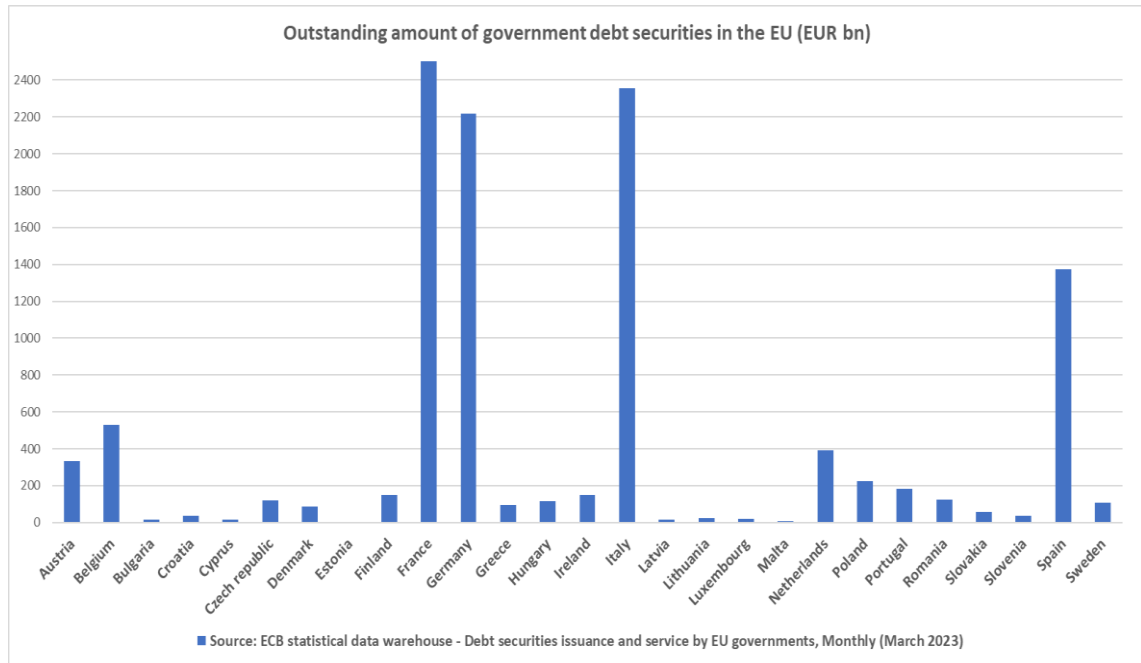
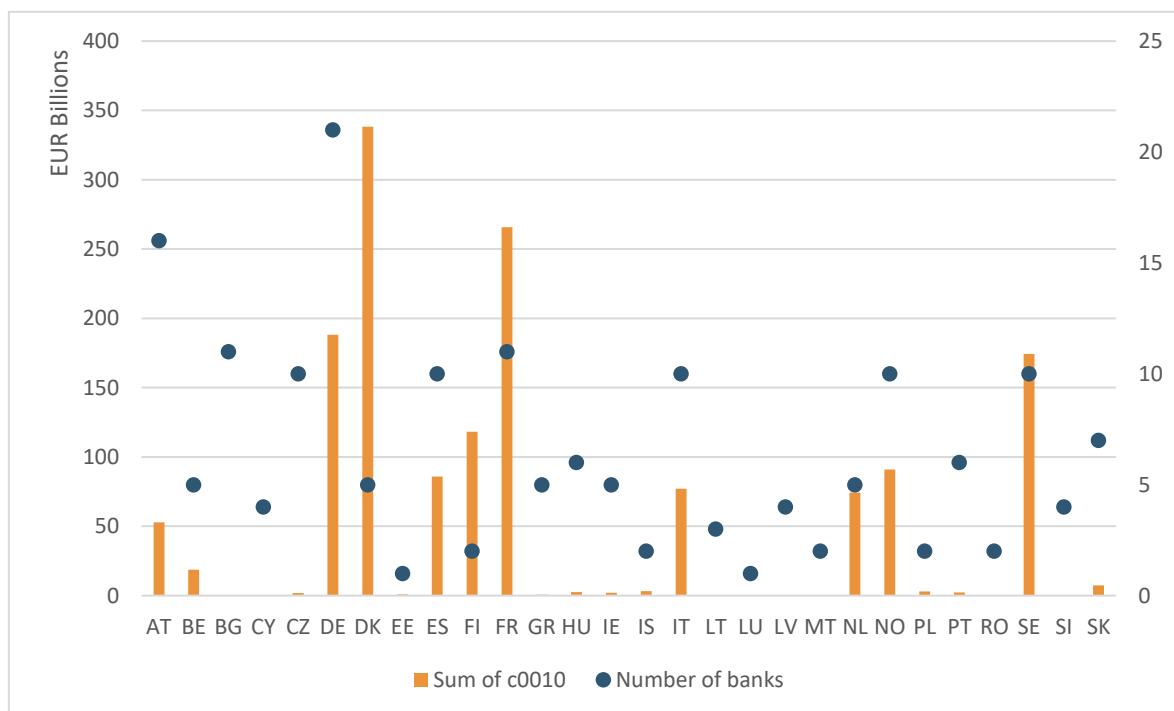


Figure 2. Amount of covered bonds issued by banks by Member State



Source: EUCLID supervisory data, reference date: December 2022

## Policy issue 2: Application of LCR general and operational requirements to highly liquid instruments

19. When specifying the highly liquid financial instruments, as mandated in point (c) of Article 38(5), the EBA shall take into account “*the liquidity coverage requirement as referred to in Article 412 of Regulation (EU) No 575/2013 and as further specified in Commission Delegated Regulation (EU) 2015/61*”.

20. The Commission Delegated Regulation (EU) 2015/61 (LCR DR) provides definitional criteria to identify specific categories of assets that could be considered as liquid assets for the LCR purposes if they meet specific general and operational requirements. Liquid assets in the LCR are ready to be liquidated immediately at any point in time, including under stress scenarios, and with no or low loss of market value. Their characteristics might serve as the basis for the definition of the eligible highly liquid financial instruments in the issuer’s reserve assets. Highly liquid financial instruments in the reserve assets aim to meet similar targets under similar conditions and scenarios, i.e. to cover payment of obligations in a prompt manner, including stress scenarios, with no or low loss of value.

21. In this regard the following options were considered:

**Option A:** All general and operational requirements should be fulfilled as in the LCR.

**Option B:** All general and operational requirements should be fulfilled but excluding the exemptions in the LCR for sovereign bonds.

22. The EBA assessed whether highly liquid financial instruments in the reserve of assets need to meet the general requirements as envisaged in Article 7 LCR DR in Table 2, and whether highly liquid financial instruments in the reserve of assets need to meet the operational requirements as envisaged in Article 8 LCR DR in Table 3.

23. Based on the assessment, all the LCR general and operational requirements should apply also to the highly liquid financial instruments in the reserve of assets. Exemptions to sovereign bonds on them, as envisaged in the LCR, should not apply here. In the LCR level 1 sovereign bonds are not subject to any haircut and are uncapped. However these sovereign bonds as highly liquid financial instruments in the reserve of assets are capped as long as a material amount of deposits with credit institutions is required as a minimum in the case of tokens referenced to official currencies.

Table 2. Assessment of adequacy of LCR general requirements for highly liquid financial instruments in the reserve of assets

LCR liquid assets	Highly liquid financial instruments in the reserve of assets
<b>Unencumbered</b>	Yes. This is required in REGULATION (EU) 2023/1114 (Recital 55, Art. 37(1)(a)) to ensure their ready availability.
<b>Not own assets or issued by group entities</b>	Yes, to avoid exposure to wrong way risk. reasonable from a liquidity soundness perspective and particularly under a stress situation, which is covered by REGULATION (EU) 2023/1114 (Articles 39(2) and 45(3)), including idiosyncratic cases, where the issuer might need to meet redemption requests. It contributes to avoid conflicts of interest in the management and investment of the reserve of assets as envisaged in Article 32(2).
<b>Not issued by financials</b>	Yes, reasonable from a liquidity soundness perspective, especially for market wide stress scenarios, covered by REGULATION (EU) 2023/1114 (Art 39(2)(b)). The EBA envisages exceptions as in the LCR (cases of covered bonds or securitisations). Exception is assessed for crypto assets that can be issued by a financial institution or credit institution.
<b>Market value public or easy to determine</b>	<p>Yes, without exemption for sovereign bonds considering that they are capped in the reserve of assets since the issuer needs to have deposits with credit institutions in the reserve of assets by at least 30% of the amount referenced in each official currency by the token, or 60% if the token is significant. However, sovereign bonds are uncapped in the LCR and can benefit from not applying this requirement.</p> <p>The reserve of assets needs to cover the liabilities against the tokens holders, valued at market value (Art 36(7) and Art 39(2)). It seems appropriate to keep this requirement here at least for the limited/capped amount of sovereign bonds in the reserve of assets.</p>
<b>Listed on a recognised exchange or tradable on generally accepted repurchase markets</b>	<p>Yes, without exemption for sovereign bonds. Again, considering the capped amount of sovereign bonds in the reserve of assets versus their uncapped amount in the LCR liquidity buffer.</p> <p>This requirement is inherent to the expectation of highly liquid financial instruments in the reserve of assets in REGULATION (EU) 2023/1114, Article 38(1) (“The investments shall be capable of being liquidated rapidly with minimal adverse price effect.”)</p>

Table 2. Assessment of adequacy of LCR operational requirements for highly liquid financial instruments in the reserve of assets

LCR liquid assets	Highly liquid financial instruments in the reserve of assets
<b>Diversified</b>	Yes, without exemption for sovereign bonds. Again, considering the capped amount of the reserve of assets of sovereign bonds versus their uncapped amount in the LCR liquidity buffer makes this requirement more necessary to

**LCR liquid assets**

**Highly liquid financial instruments in the reserve of assets**

	be met. Minimal concentration is required in REGULATION (EU) 2023/1114 (Article 38(1)). The EBA is mandated to calibrate concentration limits in the RTS (Article 38(5)).
<b>Ready access to monetise the reserve assets without legal or practical impediments</b>	Yes, inherent to the capability required in the reserve assets to be liquidated rapidly in Art 38(1) and with prompt access to them by the issuer for any redemption request at any time (Art 37(1)(c)).
<b>Under the control of the liquidity management function within the credit institution</b>	Article 37(1)(c) envisages that such ultimate control should be understood to be under the issuer as long as this article establishes that the issuers have prompt access to the reserve assets to meet any request of redemption from the tokens' holders.
<b>Subject to sales/repo test on a regular basis</b>	Yes, without exemption for sovereign bonds. Seems reasonable from a liquidity soundness perspective, again considering the capped amount of the reserve of assets of sovereign bonds versus their uncapped amount in the LCR liquidity buffer.
<b>Currency consistency</b>	<p>The LCR framework requires currency consistency between the liquidity buffer and the net outflows. The level of currency consistency is not explicit in the LCR DR where the credit institutions have the obligation to take the necessary measures to ensure such consistency and where competent authorities may also set specific limits for it.</p> <p>Article 49(4) Regulation (EU) 2023/1114 establishes that issuers of EMTs upon request by the token holder shall redeem it at any time and at par value by paying in funds the monetary value of the EMT. Last subparagraph of Article 39(2) Regulation (EU) 2023/1114 requires the issuer of ARTs to be able to redeem the token in the same currency as the funds received when issuing them. This means that the reserve of assets, that are used for the purposes of the redemption of the tokens, need to be denominated in the same currency, or hedged with currency swaps, as the obligation to the token holders, the amount of the assets referenced. Therefore, a 100% currency consistency, stricter than in the LCR, between the denomination of the reserve assets and the EMTs or ARTs is already expected in Regulation (EU) 2023/1114 to ensure that the redemption can be made in the same currency as the obligation to the token holders. Therefore, the RTS should not refer to it.</p>

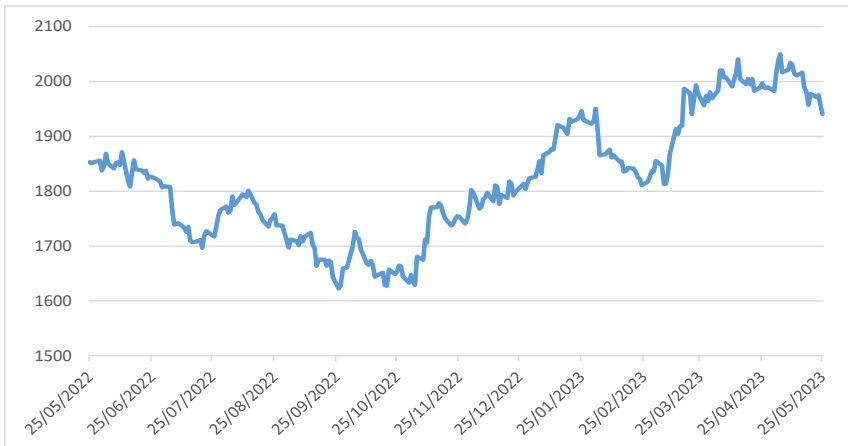
**Policy issue 3: Correlation between the highly liquid financial instruments and the assets referenced by the token.**

24. One of the most prominent risks associated with tokens is the lack of correlation between the market value of the assets referenced and the reserve assets. Reserve assets such as government bonds, covered bonds and deposits have little correlation with for instance commodities. Figure 3 presents the prices of a few commodities (gold, silver and oil) that are reference assets for certain tokens. The EBA assessed the eligibility of the financial instruments used as assets referenced (or the financial instruments relating to assets referenced, e.g. derivatives on assets referenced) as highly liquid financial instruments. With these instruments,

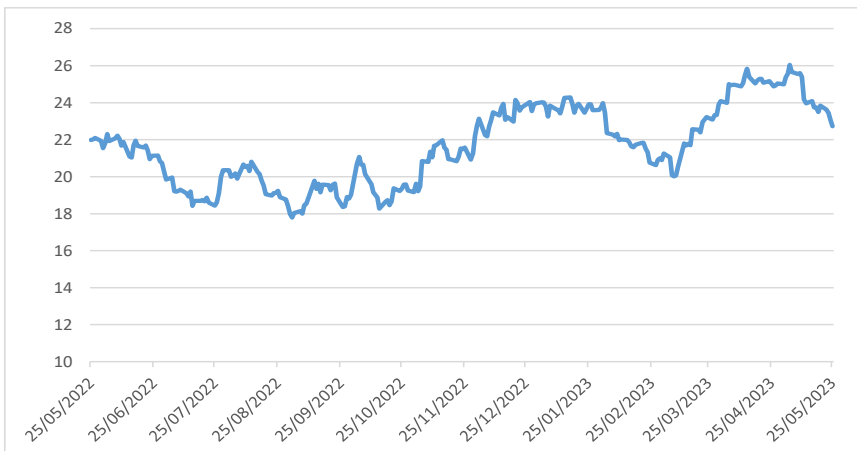
the token issuer will be able to establish a higher correlation between the assets and the liabilities.

Figure 3. Commodity prices

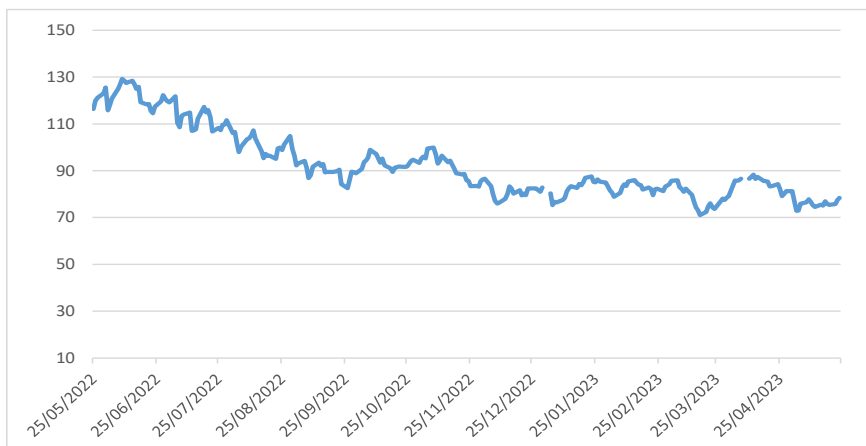
A. Gold settlement spot (USD)



B. Silver settlement spot (USD)



C. Current oil Brent settlement spot (USD)



Source: Capital IQ, S&P Global

25. Two policy options were considered here for the cases of tokens referenced to other than official currencies:

Option A: Financial instruments used as assets referenced or derivatives relating to the assets referenced are also added as highly liquid financial instruments to the general categories of assets proposed under Policy issue 1.

Option B: No additional category of highly liquid financial instruments to the one proposed by the EBA under Policy issue 1.

26. The following table summarises the main advantages and disadvantages for each policy option:

	Advantages	Disadvantages
<b>Option A</b>	<p>It gives the issuer the possibility to increase correlation between the market value of the reserve assets and assets referenced.</p> <p>The issuer would adapt the amount of assets referenced in the reserve of assets to its own risk appetite and business model. Tokens with different risk profiles of issuers for different risk profiles of investors would be available.</p>	<p>Potential unintended effects, like a higher redemption request by token holders with potential consequences on the financial systems and the crypto ecosystem, driven by a perceived high volatility of the market value of the reserve assets. This could happen if not read together with the sought to be covered volatility of the market value of the asset referenced. This seems a real possibility taking into account the complexity of these products.</p> <p>Some assets referenced used as highly liquid financial instruments would not form part of the definitional categories of liquid assets in the LCR. However, the general and operational requirements for liquid assets in the LCR are required here. This would allow for a good</p>

	<b>Advantages</b>	<b>Disadvantages</b>
		balance between a good correlation and maximum liquidity risk in these assets referenced used as highly liquid financial instruments.
<b>Option B</b>	<p>Lower volatility in the reserve of assets and market price of the token is expected.</p> <p>Simplification of the eligible highly liquid financial instruments.</p>	<p>Correlation between market value of the highly liquid financial instruments and the assets referenced would not be able to be fulfilled easily as required by Regulation (EU) 2023/1114.</p> <p>Different types of assets referenced would not be taken into account in the definition of eligible highly liquid financial instruments as required by Regulation (EU) 2023/1114.</p>

27.Regulation (EU) 2023/1114 does not seem to set too many restrictions to the assets that a token can be referenced to. This might include for example, commodities, non-HQLA, indexes. Under Option A financial instruments used as assets referenced (e.g. non-HQLA) or financial instruments relating to assets referenced by the token (e.g. derivatives relating to commodities) could be considered in the computation of the highly liquid financial instruments. No minimum or maximum amount of assets referenced in the reserve of assets would be established.

28.The EBA has opted for Option A. The EBA assessed that the benefits are greater than the potential disadvantages mainly because avoiding the possibility of correlation might indeed make the reserve assets insufficient to pay the redemption requests of token holders at any point in time. In addition to it Regulation (EU) 2023/1114 requires the EBA to take into account the different types of assets referenced for the definition of the highly liquid financial instruments. In any case the EBA does not set any minimum or maximum amount required in the form of the assets referenced within the reserve of assets but considers it as part of the risk management of the issuer to mitigate volatility by ensuring correlation and taking into account its risk appetite.

29.The EBA assessed the convenience of applying the LCR haircuts in the measurement of the highly liquid financial instruments. The EBA assessed that for simplification purposes a minimum required overcollateralization in the determination of the liquidity requirements of the issuer's reserve of assets might suffice.

#### Policy issue 4: Concentration limits by issuer of highly liquid financial instruments

30.The EBA has considered the concentration limits by issuer envisaged Article 52 of Directive 2009/65/EC for the investments of UCITs and has assessed their application to the highly liquid financial instruments as specified here.



31. Generally, the EBA follows the application of the 5% concentration limit by issuer for investments in securities or money market instruments by UCITs and applies it for securities and money market instruments in the form of highly liquid financial instruments in the reserve of assets.

32. Specifically for the cases of securities issued or guaranteed by a public entity generally the UCITs framework refers to the limit of 5% that can be increased up to 35% by the relevant Member State. As regards the cases of covered bonds member states can also increase the 5% concentration limit to 25%. The EBA has assessed these intervals for the determination of the concentration limits of those securities as highly liquid financial instruments in the reserve of assets taking into account some particular aspects. Two policy options were considered:

Option A: The default limit of 5% would apply to these categories of securities.

Option B: A 35% concentration limit would apply in the case of securities issued or guaranteed by a public entity and a 10% for the cases of covered bonds.

33. The following table captures the main advantages and disadvantages for these options:

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Option A</b>	A 5% concentration limit for government bonds issued by a single entity and for covered bonds issued by a single bank is the most prudent approach to ensure a maximum diversification. It would ensure the wider diversification approach by issuer in the UCITs framework.	<p>Keeping a 5% concentration limit for government bonds issued by a single entity would mean that the issuer of tokens referenced to official currencies other than EUR would be obliged to hold deposits with credit institutions by at least 60% of the assets referenced (to meet the minimum necessary reserve assets together with 35% of covered bonds under policy option B related to the policy issue 1) while the EBA does not suggest to increase the minimum amount required of deposits with credit institutions in its mandates under Articles 36(4) and 45(7)(b) Regulation (EU) 2023/1114.</p> <p>Keeping a 5% concentration limit by issuer of covered bonds would jeopardise the applicability of the 35% limit for covered bonds under policy option B related to the policy issue 1 in the case of those EU member states where the number of issuers of covered bonds in the relevant non-EUR currency is lower than 7.</p>
<b>Option B</b>	It takes into account potential limitations for tokens denominated in other than EUR currencies. In these	An increase of the most prudent 5% concentration limit in the case of government bonds reduces

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### Advantages

cases, when it comes to government bonds, basically issuances from an only issuer can be eligible due to the currency matching requirement in Regulation (EU) 2023/1114. A 5% concentration limit by issuer here might be very restrictive for these token issuers to meet the minimum amount of reserve of assets required to cover obligations against token holders. However, a 35% limit, in conjunction with the minimum amount of deposits with credit institutions required in Regulation (EU) 2023/1114 (at least 30% of the amount referenced) and up to 35% of the reserve of assets in the form of covered bonds under policy option B related to policy issue 1 might suffice. This is key to ensure that the requirements in Regulation (EU) 2023/1114 can be met across all member states without undue restrictions.

A 5% concentration limit by issuer of covered bonds might trigger problems of insufficient number of issuers for a currency other than EUR that would affect the availability of covered bonds of 35% of the reserve of assets. This would require at least 7 active issuers for each currency. With a 10% limit this issue would be addressed and would ensure that covered bonds are sufficiently available in each EU currency while ensuring a minimum diversification by issuer in line with UCITs framework.

### Disadvantages

diversification. However still a 35% is a minimum diversification envisaged in the UCITs framework.

A 10% concentration limit by issuer of covered bonds would reduce the minimum diversification under UCITs framework. However, a 10% is also envisaged as a possibility in the UCITs framework for covered bonds.

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34. The EBA opted for Option B. The EBA considers that it is a priority to ensure that issuers of tokens referenced to currencies other than EUR in the EU have the possibility to meet the requirements of reserve of assets without the need to implicitly impose higher minimum amount of required deposits with credit institutions beyond the limits in Regulation (EU) 2023/1114 for which the EBA does not suggest an increase. The increased concentration limits are still within the accepted thresholds in the UCITs framework.

## 5.2 Overview of questions for consultation

- Question 1.** Do respondents have any comment on the list of eligible highly liquid financial instruments provided under point (c) of Article 1(1) of these draft RTS?
- Question 2.** Do respondents have any comment on the general and operational requirements to be met by highly liquid financial instruments provided under points (a) and (b) of Article 1(1) of these draft RTS? Please explain if some criteria is expected to be challenging to be met in practice.
- Question 3.** Do respondents find the treatment for hedging derivatives under Article 2 clear to be applied?
- Question 4.** Do respondents think that the draft RTS create any impediment for issuers to ensure a good control of the correlation between the highly liquid financial instruments and the assets referenced? This is particularly relevant for the case of tokens referenced to assets other than official currencies.
- Question 5.** Do respondents have any concern about the feasibility for issuers to have the minimum amount of reserve of assets considering the list of eligible highly liquid financial instruments, the one-to-one currency matching requirement in Regulation (EU) 2023/1114 and the concentration limits under Article 3 of these draft RTS? This is particularly relevant for tokens referenced to official currencies.
- Question 6.** Do respondents have any concern about the operational feasibility of the look through approach envisaged in paragraph 3 of Article 3 of these draft RTS? If yes, please elaborate your answer and specify the reasons for the concerns.
- Question 7.** Do respondents have any comment with regards to the unwind mechanism proposed under Article 4 of these draft RTS and the related examples provided?
- Question 8.** Do respondents have any general comment about the interaction of these draft RTS with the business model and the continuity of the business of these activities?
- Question 9.** Do respondents find any provision in these draft RTS confusing or difficult to understand?
- Question 10.** Do respondent have any comment on the impact assessment provided?