

EBA/CP/2025/01

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Consultation Paper

Draft Regulatory Technical Standards on the calculation and aggregation of crypto exposure values under Article 501d(5) of the CRR



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1. Responding to this consultation

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

Comments are most helpful if they:

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

Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 08.04.2024. 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

Regulation (EU) 2024/1623 amending Regulation (EU) No 575/2013 (CRR 3) includes a transitional prudential treatment for banks' exposures in crypto-assets taking into account ongoing international developments in this area and the legal requirements introduced in Regulation (EU) 2023/1114 ('MiCAR'). The transitional treatment specifies the capital treatment of tokenised traditional assets (including Electronic Money Tokens ('EMTs')), Asset Referenced Tokens ('ARTs') and other crypto-assets). In particular, for these other crypto-assets, a total exposure limit shall be part of the transitional treatment. Furthermore, the transitional treatment provides also reporting and disclosure requirements for exposures in crypto-assets and related activities. The transitional provisions specified in Article 501d of the CRR 3 have become applicable in the Union since 9 July 2024 (i.e. date of entry into force of Regulation (EU) 2024/1623).

Article 501d(5) of the CRR 3 mandates the EBA to develop draft regulatory technical standards ('RTS') to specify the technical elements necessary for institutions to calculate their own funds requirements in accordance with the approaches set out in Article 501d (2), points (b) and (c), including how to calculate the value of the exposures in crypto-assets and how to aggregate short and long positions in crypto-assets for the purposes of the calculation during the transitional period and for the application of the total exposure limit in other crypto-assets (i.e. 1% of an institution's Tier 1). In doing so, the EBA is required to take into consideration the international standards developed by the BCBS, as well as requirements laid down under MiCAR. The EBA is required to submit those draft regulatory technical standards to the Commission by 10 July 2025.

These draft RTS aim to further specify the relevant capital treatment under the credit risk, including counterparty credit risk ('CCR'), market risk ('MR') and credit valuation adjustment risk framework for exposures under Article 501d(2), points (b) (ARTs that reference one or more traditional asset(s)) and (c) ('other' crypto-assets) and Article 501d(2) subparagraph 2 (crypto-assets exposures in tokenised traditional assets whose values depend on any other crypto-asset¹), while achieving, to the extent possible, consistency with the Basel Committee on Banking Supervision ('BCBS') standard on prudential treatment of crypto-asset exposures ('Basel standard).

These draft RTS include the relevant technical elements on the use of netting, aggregating of long and short positions, criteria to allow hedge recognition for other crypto-assets, and the underlying formulas relevant for calculating the exposure value of crypto-assets for the CCR and MR treatment.

These draft RTS also aim to ensure that institutions have reliable valuation processes of their cryptoasset exposures to ensure that they correctly calculate the own funds' requirements for exposures to crypto-assets within the scope of MiCAR and which are not financial instruments or commodities and requires institutions to include them within the scope of prudent valuation rules.

¹ The exposures in crypto-assets falling under the second subparagraph are assigned the same treatment as those cryptoasset exposures falling under point (c) of Article 501d(2) CRR3.



Next steps

Following the feedback received from the consultation, the EBA will revise, where appropriate, these draft RTS proposed for consultation and send them in their final form to the European Commission for adoption. Following the adoption by the Commission, these RTS 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

- 1. The development of crypto-assets markets and activities has been marked by significant market innovation and advancements. Credit institutions have shown increasing interest in getting involved in crypto-assets activities. This interest is driven by the potential for new revenue streams and the need to stay competitive in a rapidly evolving financial landscape. Credit institutions are exploring various roles, including acting as custodians of crypto-assets, issuing crypto-assets, and providing related services such as trading and lending on behalf of their clients. However, this involvement also comes with challenges, including regulatory compliance, risk management, and the need for a robust technological infrastructure.
- 2. Regulatory bodies have been actively working to establish comprehensive frameworks to oversee and supervise these activities. For instance, the European Union has implemented the Markets in Crypto-assets Regulation (Regulation (EU) No 2023/1114), also known as MiCAR, which regulates crypto-asset issuance and service provision in the European Union (EU). MiCAR encompasses activities such as offering asset-referenced tokens ('ARTs') and electronic money tokens ('EMTs') issuance, offer to the public and admission to trading. MiCAR came into force on 29 June 2023, with the provisions pertaining to ARTs and EMTs applicable from 30 June 2024.
- 3. The Basel Committee on Banking Supervision ('BCBS') standard on prudential treatment of crypto-asset exposures ('Basel Standard')², endorsed by the Governors and Heads of Supervision ('GHoS') in December 2022 and published the same month, aims to provide a comprehensive, robust and prudent global regulatory framework for internationally active banks' exposures and operations in crypto-assets, with the objective to preserve financial stability while promoting responsible innovation. The Committee further consulted on a set of targeted revisions to the standard in December 2023 and published the revised standard in July 2024. GHoS agreed that the final standard should be implemented by 1 January 2026 in member jurisdictions.
- 4. In light of the ongoing market developments and of the importance of rapidly providing a prudential framework to institutions before the full implementation of the Basel standards on banks' exposures in crypto-assets in the EU, Regulation (EU) 2024/1623 amending Regulation (EU) No 575/2013 (CRR 3) introduces a transitional prudential treatment for crypto-assets taking into account the legal requirements introduced in Regulation (EU) 2023/1114 (MiCAR) and specifying amongst others the capital treatment of exposures to EMTs, ARTs and 'other' crypto-assets, as well as a specific total exposure limit, reporting and disclosure requirements of exposures in crypto-assets and related activities. This transitional treatment would enable institutions to adequately capitalise their exposures until the full implementation of the Basel standards.

² https://www.bis.org/basel_framework/chapter/SCO/60.htm?inforce=20260101&published=20240717

5. According to Article 501d(1) of the CRR 3, by 30 June 2025, the Commission "shall, where appropriate, submit a legislative proposal to the European Parliament and to the Council to introduce a dedicated prudential treatment for crypto-asset exposures, taking into account the international standards and MiCAR."

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6. In the meantime, credit institutions are required to apply the transitional provisions specified in Article 501(d) (2) et seq. of the CRR3 together with the rules set out in these regulatory technical standards ('RTS')³ for their crypto-assets exposures.

3.1 Draft RTS mandate on crypto-asset exposures

3.1.1 Analysis of the draft RTS mandate

- 7. According to the mandate in Article 501d(5), EBA "shall develop draft regulatory technical standards to specify the technical elements necessary for institutions to calculate their own funds requirements in accordance with the approaches set out in paragraph 2, points (b) and (c), including how to calculate the value of the exposures and how to aggregate short and long exposures for the purposes of paragraphs 2 and 3. In developing those draft regulatory technical standards, EBA shall take into consideration the relevant internationally agreed prudential standards as well as existing authorisations in the Union under Regulation (EU) 2023/1114" (MiCAR).
- 8. The mandate given to the EBA under Article 501d(5) of the CRR 3 includes in its scope ARTs whose issuers comply with Regulation (EU) 2023/1114 and that reference one or more traditional asset(s) and 'other crypto-assets' (including for example ARTs referencing a crypto-asset and unbacked crypto-assets, such as Bitcoin)⁴.
- 9. Within the scope of the mandate, it is also necessary to specify how to determine the exposure value for transactions giving rise to counterparty credit risk within the credit risk framework and how to calculate the risk weighted exposure amount for market risk and/or credit valuation adjustment risk when institutions calculate the own funds requirements for exposures to ARTs and 'other' crypto-assets. For derivatives or securities financing transactions (SFTs') referencing crypto-assets, the exposure calculation must be further specified in order to operationalize the treatment laid down in Article 501d(2) of the CRR 3, for both counterparty credit risk and market risk.
- 10. The objective of these draft RTS is to further specify technical elements that ensure a sound prudential treatment of crypto-assets exposures in the EU, implementing the transitional provisions laid down in CRR 3 and taking into consideration, to the extent possible, the Basel standard on prudential treatment of crypto-asset exposures. This will overall result in a

³ From the moment the RTS enters into force.

⁴ Out of scope of the mandate is point (a) of Article 501d(2) of the CRR 3 on tokenised traditional assets (including EMTs, see Art 5a(5) off CRR 3), due to the fact that those assets are treated as exposures in the traditional asset(s) that they represent and, thus, there is no need to lay down additional technical elements.



proportionate and risk sensitive treatment of crypto-asset exposures and ensure that credit institutions will appropriately calculate and capitalise all the risk types of the crypto-assets exposures in a harmonised and robust manner.

11.One of the challenges while developing these draft RTS is to ensure that the EU MiCAR-based classification of crypto-asset-exposures as specified in Article 501d of CRR 3 is adhered to, while also taking into consideration the international standard and align some of the technical requirements for different crypto-assets. We note here that the Basel classification conditions for crypto-asset exposures might result in a different classification for some of these exposures compared to the transitional CRR 3 regime which incorporates elements of MiCAR and the BCBS regime.

3.1.2 Capital treatment of crypto-asset exposures

- 12.These draft RTS specify the relevant capital treatment under the credit risk including counterparty credit risk, market risk and credit valuation adjustment risk framework for exposures under Article 501d(2), points (b) (ARTs that reference one or more traditional assets) and (c) 'other' crypto-assets and under Article 501d(2) subparagraph 2 (crypto-assets to tokenised traditional assets whose values depend on any other crypto-asset) of the CRR 3.
- 13.Considering the MiCAR classification of crypto-assets that was reflected in the transitional treatment of the CRR 3, the Basel Standard grouping of crypto-assets and the differences between the two, these draft RTS aligns to a certain extent the remaining elements of the capital treatment laid down in the transitional requirements in CRR 3 with the elements specified in the Basel standard, as follows:
 - a. Crypto-assets referred to in Article 501d(2), point (b), of the CRR are broadly subject to the general risk weight of 250%; in the BCBS standard this corresponds to the Group 1b crypto-assets⁵, even though the capital treatment is simplified in CRR 3 with the uniform risk weight,
 - b. Crypto-assets referred to in Article 501d(2), point (c), of the CRR are subject to a general 1,250% RW. This is the same treatment as set out in the BCBS standard for Group 2b crypto-assets.
 - c. For the definition of criteria for a limited recognition of hedging and netting, these draft RTS lay down provisions similar to those set out in the Basel standard⁶. Crypto-assets referenced in Article 501d(2), point (c), of the CRR that meet these criteria, will have the same treatment as for Group 2a crypto-assets with the application of a general 1,250% RW for the credit risk RWA calculation.

⁵ Group 1b crypto-assets need to meet the classification conditions set out in the BCBS standard.

⁶ SCO60.55 and SCO60.56

d. Crypto-assets referred to in the second subparagraph of Article 501d (2) of the CRR follow the same treatment as the crypto-assets referred to in Article 501d(2), point (c) of the CRR, which could be mapped to the Group 2a or Group 2b crypto-assets.

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- 14. These draft RTS further specify that the risk weights laid down in Article 501d (2) must be applied to direct credit risk exposures in crypto-assets. These draft RTS also specify rules to calculate the exposure value for derivatives and SFTs to which this risk weight is applied. For crypto-assets instruments that give rise to counterparty credit risk, the CP is consulting on 2 possible alternatives. Those exposures could either be assigned the same risk weight as for direct credit risk exposures in crypto-assets, which would be more conservative(Alternative A) or could be risk-weighted following the usual CCR approach, i.e. apply the counterparty's risk weight, which would be more consistent with the existing framework and easier to implement by institutions (Alternative B). These draft RTS also incorporate a market risk framework for crypto-assets exposures that give rise to market risk. Crypto-assets exposures giving rise to market risk are not explicitly risk weighted in Art. 501d of Regulation (EU) 575/2013, as such institutions should follow the market risk rules specified in these draft RTS for those exposures to ensure for a proportional and risk sensitive treatment.
- 15. Also, all the relevant technical elements of the Basel standards on the use of netting, aggregating of long and short positions, hedge recognition criteria, and the underlying formulas relevant for calculating the exposure value of crypto-assets for the CCR, MR and CVA treatment are included in these draft RTS. These draft RTS include the possibility of recognising, subject to specific conditions, some hedging in the calculation of the crypto-asset exposures for a subset of the crypto-assets referred to in Article 501d(2), point (c), of the CRR 3;
- 16.These draft RTS also clarify how to apply the alternative standardised approach and the alternative internal models for the calculation of own funds requirements for crypto-assets exposures. The latter of those approaches will become applicable, once the CRR 3 market risk rules become applicable in the EU. Until then, the market risk own funds requirements for crypto-assets can only be calculated by using the simplified standardised approach. For the purposes of the output floor calculation, the alternative standardised approach can be used.

3.1.3 Valuation and accounting challenges of crypto-assets

- 17.To ensure the correct calculation of the own funds' requirements for exposures to crypto-assets it is important also to make sure that the valuation of crypto-asset exposures is reliable. However, there are currently no specific international accounting standards on crypto-assets.
- 18. In March 2019, the International Financial Reporting Interpretations Committee published, after approval by the International Accounting Standards Board, a tentative agenda decision to confirm the accounting treatment of cryptocurrencies applying the current International

Financial Reporting Standards ('IFRS') framework and confirmed that cryptocurrencies⁷ may meet the definition of either an intangible asset or inventory, depending on the circumstances. The IFRS concluded that a holding of cryptocurrency is not a financial asset. This is because a cryptocurrency is not cash. Nor is it an equity instrument of another entity. It does not give rise to a contractual right for the holder, and it is not a contract that will or may be settled in the holder's own equity instruments.

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- 19.According to an ESMA analysis, prices of crypto–assets (without EMTs) are characterised by highly volatile 'boom and bust' cycles and an overall co-movement with equity markets.
- 20.While the degree of volatility is significantly higher for crypto-assets not referencing any other assets (so called unbacked crypto-assets), under certain market conditions also stablecoins have evidenced that their prices could significantly deviate from par. According to an analysis performed by S&P Global, the two largest stablecoins (USDC and USDT) exhibited in the period June 2021 June 2023 an annualized price volatility by 8.7% and 5.09% respectively.
- 21. In addition, specificities of the crypto-assets trading, particularly related to the availability of reliable pricing data, or the lack of transparency in relation to crypto-asset price formation on different exchanges or private venues, as well as the observed price differences between these venues, give rise to significant valuation uncertainty. Against this backdrop, it is important that all relevant crypto-assets are captured by Article 105 of Regulation (EU) No 575/2013 which establishes the requirements for prudent valuation of fair valued positions.
- 22.Furthermore, it is expected that a significant part of crypto-assets regulated by MiCAR⁸ will be valued at fair value under the applicable accounting framework. These draft RTS proposes to clarify that such crypto assets shall be subject to the requirements for prudent valuation in accordance with Article 105 of Regulation (EU) No 575/2013, and thus that any reference to valuation positions or to financial instruments and commodities in these draft RTS on Prudent Valuation shall be read to include also crypto-assets⁹.

3.2 Entry into force and application of CRR 3

23.On 19 June 2024, Regulation (EU) 2024/1623 amending Regulation (EU) No 575/2013 (CRR 3) as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor was published in the Official Journal of the EU.

⁷ The IFRS interpretation committee relates to a subset of crypto asset, i.e. "cryptocurrencies" which are characterised by the following a) digital or virtual currency recorded on a distributed ledger that uses cryptography for security, b) not issued by a jurisdictional authority or other party, c) does not give rise to a contract between the holder and another party.

⁸ MiCAR applies to crypto-assets that do not fall within the scope of any other EU legislation. MiCAR crypto-assets are neither financial instruments nor commodities, which means that such crypto-assets are not in the scope of the current DRAFT RTS on Prudent Valuation under Article 105(14) of CRR in force.

⁹ The sequence of amending the DRAFT RTS on Prudent Valuation under Article 105(14) of CRR and this DRAFT RTS needs to be further analysed.



- 24. Whilst most of the CRR 3 provisions will apply from 1 January 2025, Article 501d on transitional provisions on the prudential treatment of crypto-assets has already been applicable since 9 July 2024.
- 25.On 24 July 2024, the European Commission adopted a delegated act¹⁰ that postpones the date of application of the Basel III fundamental review of the trading book (FRTB) standards in the EU for the banks' calculation of their own funds' requirements for market risk by one year (i.e. until 1 January 2026). Thus, during the postponement period, the current market risk framework remains applicable for credit institutions. These draft RTS take that element into account and, where necessary, lay down specific technical elements for both the current framework and the FRTB one. This means to ensure consistency between the application date of the own funds requirements for market risk in Regulation (EU) 2024/1623 and these draft RTS; as such, the alternative standardised approach and the alternative internal model approach included in these draft RTS can only be applied for the calculation of unfloored own funds requirements for crypto-assets exposures once the new market risk rules have become applicable in the EU.
- 26.Consequently, during the postponement period, the unfloored market risk own funds requirements for crypto-assets can only be calculated by using the simplified standardised approach, for crypto-assets qualifying for a separate market risk treatment.¹¹ For purposes of the output floor calculation, either the alternative standardised approach or the simplified standardised approach are applicable as specified in the Communication package provided by the European Commission and response from the EBA¹².

¹⁰ https://webgate.ec.europa.eu/regdel/#/delegatedActs/2528

¹¹ I.e. crypto-assets referred to in Article 501d(2)(c) or 501d(2), second subparagraph of the CRR 3 that do not meet the hedging recognition criteria there is no specific market risk treatment as these are subject to the single own funds requirement calculation.

¹²https://www.eba.europa.eu/publications-and-media/press-releases/eba-responds-european-commissions-delegatedact-postponing-application-market-risk-framework-eu



4. Draft regulatory technical standards

In between the text of these draft RTS/ITS/Guidelines/advice that follows, further explanations on specific aspects of the proposed text are occasionally provided, which either offer examples or provide the rationale behind a provision or set out specific questions for the consultation process. Where this is the case, this explanatory text appears in a framed text box.



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

of XXX

Regulation (EU) 2024/1623 of the European Parliament and of the Council with regard to regulatory technical standards specifying technical elements necessary for institutions to calculate their own funds requirements on crypto-asset exposures

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2024/1623 of the European Parliament and of the Council on prudential requirements for credit institutions, and amending Regulations (EU) 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor and (EU) No 648/2012 and in particular Article 501d(5), thereof,

Whereas:

- (1)The importance of having an accurate valuation of crypto-asset exposures ensures the correct calculation of the own funds requirements of those exposures. However, no international accounting standards currently exists on crypto-assets. In March 2019, the International Financial Reporting Interpretations Committee published, after approval by the International Accounting Standards Board, a tentative agenda decision to confirm the accounting treatment of cryptocurrencies applying the current International Financial Reporting Standards framework and confirmed that cryptocurrencies may meet the definition of either an intangible asset or inventory, depending on the circumstances¹³. Specificities of the crypto-assets trading, particularly related to the availability of reliable pricing data, or the lack of transparency in relation to cryptoasset price formation on different exchanges or private venues, as well as, the observed price differences between these venues, give rise to significant valuation uncertainty. Hence, it is important that all relevant crypto-assets are captured by Article 105 of Regulation (EU) No 575/2013 which establishes the requirements for prudent valuation of fair valued positions consisting of traditional assets and liabilities.
- (2) Article 501d(2) of Regulation (EU) No 575/2013 specifies the transitional treatment for the calculation of own funds requirements for crypto-asset exposures based on the crypto-assets classification specified in Regulation (EU) 2023/1114. In line with the mandate, in further specifying the technical elements of the transitional treatment, this Regulation sources relevant elements from the Basel Committee standard by specifying the relevant capital treatment under the credit risk including counterparty credit

¹³ https://www.ifrs.org/news-and-events/updates/ifric/2019/ifric-update-march-2019/



risk, market risk and/or credit valuation adjustment risk framework for exposures under Article 501d(2), points (b) and (c) and under Article 501d(2) subparagraph 2 of Regulation (EU) No 575/2013.

- (3) To ensure institutions align calculation and capitalisation of crypto-assets exposures according to the relevant capital treatment for the related risks, institutions should assign crypto-assets exposures to the banking book or trading banking book based on the application of the boundary criteria for equivalent traditional assets.
- (4) For crypto-assets exposures giving rise to direct credit risk, institutions should apply the risk-weights laid down in Article 501d(2), while for crypto-assets exposures giving rise to market risk the treatment is specified further in this Regulation for those exposures to ensure for a proportional and risk sensitive treatment.
- (5) Institutions holding exposures in asset-referenced tokens whose issuers comply with Regulation (EU) 2023/1114 and that reference one or more traditional asset(s) should analyse the structures of the issuance including the referenced traditional assets and identify all risks that could result in a loss. Institutions should identify all possible credit risk arising from their exposures in the crypto-assets using the relevant own funds requirements for credit risk exposures set out in Regulation (EU) No 575/2013 and in Article 2 of this Regulation.
- (6) The crypto-assets referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013 often lack intrinsic value, as they are not backed by traditional assets. The value of these assets could be highly volatile and influenced by market motivation. Due to the relatively limited adoption of most of these crypto assets they could also suffer from liquidity shortage, making it difficult to buy or sell large quantities without affecting the market price. The technical elements specified in Article 3 of this Regulation provide the necessary criteria to assess which prudential treatment is justified.
- (7) Crypto-asset derivatives markets have experienced substantial growth and innovation in recent years. As such, it is important to capture in the calculation of own funds requirements, the counterparty credit risk (CCR) and credit valuation adjustment (CVA) risk institutions assume via derivatives or through other entities that reference crypto-assets. These indirect exposures in crypto-assets not only harbour market risk, but also counterparty credit risk as a default or deterioration in the credit quality of the derivative counterparty has a negative effect on the value of the derivative. Furthermore, crypto-asset derivatives often offer the possibility to build up position with a very high leverage. Considering the significant volatility of crypto-assets' prices it cannot be excluded that under certain market conditions, losses could exceed the amount of own funds required for the specific position even when applying a 1250% risk weight. Should this occur, it is therefore prudent for institutions to immediately notify their competent authority.
- (8) Hedging reduces risk and limits potential losses on exposures that institutions hold, hence capital requirements for hedged exposures should generally be lower than for identical unhedged exposures and should be calculated on the netted exposure. However, due to specificities of crypto-assets trading, such as the price difference between different venues and higher price volatility than for traditional assets, it is important to consider the differences in risks when determining the level of hedging and netting institutions are allowed to recognise for the determination of the net exposure calculation for crypto-assets. As such, the risk of crypto-asset captured in Article 501d(2),



point (b) or for derivatives that reference them is lower than that of those captured in Article 501d(2), point (c), hence the level of hedging and netting recognised for the latter should be smaller.

- (9) The market liquidity characteristics and the market price setting of crypto-assets differ from traditional assets. In addition, the period of time over which crypto-assets could be liquidated and the depth of market liquidity during a period of downturn under distressed market conditions are uncertain. Hence, crypto-assets captured in Article 501d(2), points (b) and (c) of Regulation (EU) No 575/2013 should not be eligible for recognition of credit risk mitigation even if the referenced traditional assets comply with the relevant eligibility requirements for collateral recognition as the process of redemption may add counterparty risk that is not present in a direct exposure to traditional assets. Furthermore, as with all non-eligible collateral, institutions that lend crypto-assets captured in Article 501d(2), points(b) and (c) of Regulation (EU) No 575/2013 as part of a securities financing transaction ('SFT') should apply a prudential haircut.
- (10) On the 24 July 2024, the European Commission adopted a delegated act¹⁴ that delays the date of application of the market risk rules laid down in Regulation (EU) 2024/1623 to 1 January 2026. It is important to ensure consistency between this Regulation and the European Commission delegated act until the date of application of the Basel III fundamental review of the trading book (FRTB) standards in the EU, the unfloored market risk own funds requirements for crypto-assets exposures should only be calculated by institutions continuing to apply the standardised approach applicable in Regulation (EU) 575/2013 in its version in force on 8 July 2024. For the purposes of the output floor calculation, institutions should either use the alternative standardised approach or the standardised approach.
- (11) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Banking Authority.
- (12) The European Banking Authority 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,¹⁵

¹⁴ Commission Delegated Regulation (EU) 2024/2795 of 24 July 2024 amending Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to the date of application of the own funds requirements for market risk (OJ L, 2024/2795)

¹⁵ 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, 15.12.2020, p. 12-47).



HAS ADOPTED THIS REGULATION:

Article 1

Prudent valuation of crypto-assets and off-balance sheet exposures

Crypto-assets within the scope of Regulation (EU) 2023/1114¹⁶, which are not financial instruments or commodities, and are valued at fair value under the applicable accounting framework, shall be subject to the requirements for prudent valuation in accordance with Article 105 of Regulation (EU) No 575/2013. Thereafter, any reference to valuation positions or to financial instruments and commodities in Delegated Regulation (EU) 2016/101¹⁷ shall be read to include also crypto-assets.

Explanatory text for consultation purposes

Specificities of the crypto-assets trading, particularly related to the availability of reliable pricing data, or the lack of transparency in relation to crypto-asset price formation on different exchanges or private venues, as well as the observed price differences between these venues, give rise to significant valuation uncertainty.

Against this backdrop, it is important that all relevant crypto-assets are captured in scope of Article 105 of Regulation (EU) No 575/2013 which establishes the requirements for prudent valuation of fair valued positions.

Questions

Q1: Do you agree that fair-valued crypto-assets within the scope of MiCAR should be included within the scope of the prudent valuation rules? If not, please explain.

Q2: Do you have any concern in relation to the application of the requirements specified in Article 105 CRR and Delegated Regulation (EU) 2016/101(RTS on Prudent Valuation) to crypto-assets? If so, please explain.

¹⁶ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (OJ L 150, 9.6.2023, p. 40 <u>http://data.europa.eu/eli/reg/2023/1114/oj</u>)

¹⁷ Commission Delegated Regulation (EU) 2016/101 of 26 October 2015 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for prudent valuation under Article 105(14) (OJ L 21, 28.1.2016, p. 54–65, ELI: http://data.europa.eu/eli/reg_del/2016/101/oj)



Article 2

Calculation of own funds requirements for exposures referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013

- 1. Institutions shall apply a 250% risk weight when calculating the own funds requirements for credit risk following the rules specified in Part Three, Title II, of Regulation (EU) No 575/2013.
- 2. The crypto-assets referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013 are not eligible forms of collateral for the purpose of recognition as credit risk mitigation as set out in Article 108 of Regulation (EU) No 575/2013.
- 3. Where transactions referencing crypto-assets referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013 give rise to counterparty credit risk, institutions shall calculate the own funds requirements as follows:
 - a. for securities financing transactions with a crypto-asset underlying, institutions shall apply the requirements set out in Articles 223 to 228 of Regulation (EU) No 575/2013 for traditional assets, without recognising the crypto-assets as eligible collateral for the calculation of the net exposure to the counterparty, and for institutions that lend these crypto-assets, a volatility adjustment of 30% shall apply.
 - b. for derivatives on crypto-assets, institutions shall apply the same requirements as for derivatives on traditional assets set out in Articles 272 to 311 of Regulation (EU) No 575/2013.
 - c. Alternative A (using the 250% RW from Article 501d(2)(b) CRR 3 also for CCR purposes): for a netting set containing derivatives on traditional assets or crypto-assets referred to in Article 501d(2), point (a) of Regulation (EU) No 575/2013, and derivatives on crypto-assets referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013, institutions shall either:
 - i. apply the risk weight referred to in paragraph 1 of this Article to the whole netting set; or
 - ii. assign the crypto-assets referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013 to a separate netting set and apply the risk weight referred to in paragraph 1 of this Article to that separate netting set.

Alternative **B** (using the standard risk weighting rules for CCR that are also applicable for EQ derivatives): for calculating the own funds requirements for transactions giving rise to counterparty credit risk, institutions shall apply the requirements specified in Part Three, Title II, of Regulation (EU) No 575/2013, using the risk weight applicable to that counterparty in accordance with those requirements.

Explanatory text for consultation purposes

The Basel standard (SCO60.97) specifies that derivatives on Group 1b cryptoassets will be subject to the same rules to determine CCR RWA as traditional assets (ie the rules set out in the credit risk standards CRE50 to CRE56, meaning



that the CCR exposures get assigned the risk weight applicable to the counterparty.

Those exposures could either be assigned the same risk weight as for direct credit risk exposures in crypto-assets independent of the counterparty with whom the derivatives are traded (Alternative A), which would be more conservative, or could be risk-weighted following the usual CCR approach, i.e. apply the counterparty's risk weight (Alternative B), which would be consistent with the existing framework and easier to implement for institutions.

Questions

Q3: Do you agree that a one-size fits all RW of 250% should apply also to CCR transactions requiring specifications on netting set treatment (Alternative A) or do you prefer using the counterparty's RW as is standard in CCR (Alternative B)? Please briefly justify your assessment.

- 4. Institutions shall calculate the own funds requirements for market risk for exposures to crypto-assets referred to in Article 501d(2), point (b), of Regulation (EU) No 575/2013 by applying the requirements set out for traditional assets in Part Three, Title IV, of Regulation (EU) No 575/2013, with the following specifications:
 - a. where institutions calculate the own funds requirements for market risk on the basis of the approach set out in Part Three, Title IV, Chapters 2, 3 and 4 and Article 325(2) of Regulation (EU) No 575/2013, the crypto-assets shall be subject to the same requirements, as applicable to the traditional assets it references and the following additional specifications shall apply:
 - i. all instruments, including derivatives and off-balance sheet positions that are affected by changes in prices of crypto-assets shall be included;
 - ii. Each crypto-asset position shall be expressed in terms of the cryptoasset's quantity and converted at the current spot price into the institution's reporting currency;

Explanatory text for consultation purposes

For example, if the traditional asset that the crypto-asset references is a basket of equity instruments, then the crypto-asset would be subject to own funds requirements for general and specific risk of equity instruments; if the traditional asset referenced is a basket of currencies, the crypto-asset would be subject to own funds requirements for foreign exchange risk.

- iii. The treatment defined for options on the traditional assets that the crypto-asset references shall apply also for options referencing such a crypto asset;
- iv. netting and hedging shall be recognised between the crypto-asset and the traditional asset it references.



- for the purposes of the calculation of the own funds requirements for delta, vega and curvature risks, institutions shall assign the cryptoasset to the risk classes referred to in Article 325d(1) of Regulation (EU) 575/2013 as applicable to the traditional assets that the cryptoasset references, where:
 - 1. each crypto-asset shall comprise the same risk factors as the traditional assets it references; and

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- 2. the sensitivities of the crypto-asset to the risk factors referred to in point (1) above shall be identical to the sensitivities of the traditional assets that the crypto-asset references to those risk factors;
- ii. for the purposes of calculating the own funds requirements for default risk, the gross jump-to-default amount, as set out in Article 325v(1), point (c) of Regulation (EU) No 575/2013, of the crypto-asset shall be determined as the jump-to-default amount of an equivalent position in the traditional assets that the crypto-asset references;
- c. where institutions calculate the own funds requirements for market risk on the basis of the alternative internal model approach set out in Part Three, Title IV, Chapter 1b of Regulation (EU) No 575/2013, the following additional specifications shall apply:

Explanatory text for consultation purposes

The Basel standard (SCO60.47) specifies that crypto-assets are in scope of the calculation of the non-default risk own funds requirements (i.e. ES and SES calculations) and in scope of the DRC.

For the ES- and SES-calculations, the Basel standard includes no deviations from the 'standard' rules applicable under the alternative internal model approach to traditional assets and does not include further details on how to specifically reflect the features of crypto-assets. These draft RTS do not contain specific provisions on this either.

Questions

Q4: Are there any credit institutions considering implementing the alternative internal model approach during the transitional period, or consider implementing it in the medium to long term? Would there be an impact for the development of the crypto-assets market in the EU, and/or for the capitalisation and/or business activities of European credit institutions, if the use of the alternative internal models approach in the short to medium term is not permitted?



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- ii. for the purposes of calculating the own funds requirements in accordance with Article 325ba(2) of Regulation (EU) No 575/2013, the crypto-asset and the traditional assets it references shall be treated as different instruments to the same obligor, where:
 - 1. the internal default risk model shall account for the different losses in those different instruments in accordance with Article 325bo of Regulation (EU) 575/2013;
 - 2. differences in instruments shall be reflected in LGD estimates;
 - 3. maturity mismatches applicable to crypto-assets and traditional assets they reference shall be captured in accordance with Article 325bo of Regulation (EU) 575/2013.

Explanatory text for consultation purposes

In addition to providing guidance on the crypto-asset and the traditional assets being treated as distinct instruments, the Basel standard (SCO60.50) recalls that

- The DRC requirement must account for different losses in the different instruments.
- Differences in instruments should be reflected in LGD estimates.
- Maturity mismatches between the crypto-asset and the traditional assets it references, need to be captured.

The equivalent provisions of the CRR can be found in Articles 325bo and 325bp.

In the light of the fact that the three points raised above do not constitute a deviation from the 'standard' rules, or specification on how to apply those standard rules, they are not included in the draft wording of these draft RTS.

d. Institutions shall not use the internal model approach set out in Part Three, Title IV, Chapter 5, of Regulation (EU) No 575/2013 for the calculation of the own funds requirements for market risk for crypto-assets.

Explanatory text for consultation purposes

Until the FRTB framework becomes the binding framework for calculating the unfloored own funds requirements, institutions could, in theory, apply also the current (CRR2-) internal models to positions in crypto-assets referred to in Article 501d(2), point (b), CRR. Considering that institutions in the EU do not appear to hold significant positions in such assets at this time, and that the period between the entry force of these draft RTS and the full application of the FRTB framework is expected to be limited, these draft RTS require institutions to calculate the (unfloored) own funds re-



quirements for those positions solely on the basis of the standardised approach, rather than specifying how to apply the current internal models to those positions.

- 5. Institutions shall calculate their own funds requirements for credit valuation adjustment risk for derivatives and securities financing transactions on crypto-assets referred to in Article 501d(2), point (b) of Regulation (EU) No 575/2013 by applying the requirements laid down in Articles 382 to 386 of Regulation (EU) No 575/2013 for the traditional assets that the crypto-asset references.
- 6. Institutions shall treat the risk of default of an issuer of crypto-assets which references one or more traditional asset in line with the minimum risk-based own funds requirements for credit risk, where that issuer is unable to meet the permanent right of redemption of asset-referenced tokens set out in Article 39 of Regulation (EU) No 2023/1114.

Explanatory text for consultation purposes

The Basel standard (SCO60.41) specifies that if present in a Group 1b crypto-asset, the risk of default of the redeemer and the risks arising when intermediaries perform the redemption function should be treated in line with the minimum risk-based capital requirements for credit risk.

Article 46 MiCAR states that the recovery plan (of the issuer) shall include appropriate conditions and procedures to ensure the timely implementation of recovery actions as well as a wide range of recovery options, including: (a) liquidity fees on redemptions; (b) limits on the amount of the asset-referenced token that can be redeemed on any working day; (c) suspension of redemptions. In such a circumstance, the token is still an ART from a legal point of view, but the issuer does not ensure anymore the right of redemption at sight – because of its distress. Therefore it is appropriate for credit institutions to capitalise the risk of default of the issuer, where relevant.

Questions

Q5: Do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of this draft RTS during the transitional period or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.



Article 3

Calculation of own funds requirements for exposures referred to in Article 501d (2), point (c) of Regulation (EU) No 575/2013

- 1. An institution shall calculate the own funds requirements for credit risk, market risk and credit valuation adjustment risk of an exposure in a crypto-asset referred to in Article 501d (2), point (c), of Regulation (EU) No 575/2013 in accordance with paragraphs 2 to 5 of this Article, if all of the following criteria are met:
 - a. the institution's crypto-asset exposure is any of the following:
 - i. a direct holding of the crypto-asset where there exists a derivative or exchange-traded fund (ETF) or exchange-traded note (ETN) that solely references the crypto-asset and that is traded on a regulated exchange and, in the case of a derivative, is cleared through a qualifying central counterparty (QCCP);
 - ii. a derivative or an ETF or an ETN that references that crypto-asset, where the derivative or ETF or ETN has been explicitly approved by the competent authority for trading or the derivative is cleared by a QCCP;
 - iii. a derivative or an ETF or an ETN that references a derivative or an ETF or an ETN that meets the conditions laid down in point (ii);
 - iv. a derivative or an ETF or an ETN that references a crypto-asset-related reference rate published by a regulated exchange that clears trades using this reference rate through a QCCP.
 - b. The crypto-asset underlying the exposure meets all of the following conditions:
 - i. its average market capitalisation is higher or equal to EUR10 billion over the previous year; and
 - ii. the 10% trimmed mean of daily trading volume with major currencies is higher or equal to EUR50 million over the previous year.

Explanatory text for consultation purposes

The Basel standard refers to currencies as fiat currencies to avoid any doubt that a crypto-asset might be meant. However, in Regulation (EU) No 575/2013 only the term currency is used to refer to these fiat currencies. Furthermore, crypto-assets are consistently referred to as crypto-assets or tokenised assets. Hence, the use of the term currency is sufficient to make clear that it is not meaning any crypto-asset as referred to in Article 501d(2) of Regulation (EU) No 575/2013.

c. available crypto-asset data meets all of the following conditions:

i. there are at least 100 price observations over the previous year that comply with the criteria for verifiable prices laid down in Article 2 of Commission Delegated Regulation 2022/2060¹⁸;

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ii. there are sufficient data on trading volumes and market capitalisation.

Explanatory text for consultation purposes

The Basel standard (SCO60.55) sets out three criteria (hedging recognition criteria) that credit institutions should assess to determine if crypto-asset exposure qualify for the recognition of some hedging and/or netting when calculating the exposure or position value with modified versions of the simplified standardised approach or the standardised approach for market risk and the SA-CCR for counterparty credit risk. Crypto-assets that do not meet all of the hedging recognition criteria are subject to a more conservative treatment.

These draft RTS incorporate the above-mentioned criteria for calculation of own funds requirements for exposures referred to in Article 501d (2), point (c), of the CRR, as it is deemed that for very liquid crypto-assets a partial exposure hedging / netting should be recognised in order to provide the right incentives for risk reduction.

Questions

Q6: How relevant is it to incorporate this differentiation for crypto-assets exposures referred to in Article 501d (2), point (c), of the CRR at this stage? Are institutions confident that they can assess their crypto-assets exposures against the criteria set out in these draft RTS? Is there sufficient market data available to make those assessments?

- 2. Institutions shall follow the requirements specified in Part Three, Title II, Chapter 2, of Regulation (EU) No 575/2013 which refer to own funds requirements for credit risk, applying the 1250% risk weight, for calculating own funds requirements for exposures referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013 that meet the criteria laid down in paragraph 1 of this Article. When institutions calculate the exposure for these crypto-assets, the specifications of paragraphs 3 and 4 of this Article apply.
- 3. Institutions shall calculate the exposure value for transactions referencing cryptoassets referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013 that give rise to counterparty credit risk and that meet the hedging recognition criteria laid down in paragraph 1 of this Article as follows:
 - a. Institutions calculating the net exposure to the counterparty for securities financing transactions with a crypto-asset as underlying, shall apply the requirement set out in Articles 223 to 228 of Regulation (EU) No 575/2013 as

¹⁸ Commission Delegated Regulation (EU) 2022/2060 of 14 June 2022 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards specifying the criteria for assessing the modellability of risk factors under the internal model approach (IMA) and specifying the frequency of that assessment under Article 325be(3) of that Regulation. (OJ L 276, 26.10.2022, p. 60 <u>http://data.europa.eu/eli/reg_del/2022/2060/oj</u>).



applicable for traditional assets, without recognising the crypto-assets as eligible collateral. Institutions that lend these crypto-assets shall apply a volatility adjustment of 30% that is consistent with the volatility adjustment appropriate for other non-eligible securities laid down in Article 224(4) of Regulation (EU) No 575/2013;

b. Institutions calculating the exposure value for derivatives on crypto-assets, shall apply the requirements of Articles 272 to 282 and 298 to 311 of Regulation (EU) No 575/2013, where the following additional specifications apply:

Explanatory text for consultation purposes

The Basel standard (SCO60.98(1)) recalls that crypto-assets are part of the legally enforceable netting set for the calculation of the replacement costs (RC). No deviations from the 'standard' rules are applicable nor further details on how to specifically reflect the features of crypto-assets when calculating the RC are provided, therefore there was no need to include in these draft RTS a similar provision.

- i. Institutions calculating the potential future exposure (PFE) add-on, institutions shall create a new risk category 'crypto-assets' and :
 - 1. calculate the PFE add-on for this risk category similarly to the calculation for the foreign exchange risk category applying a supervisory factor of 32% for all crypto-asset/currency and crypto-asset/crypto-asset pairs, and a supervisory volatility of 120% for the delta adjustment of options;
 - 2. separate hedging sets for each crypto-asset priced in a currency or in another crypto-asset that meets the requirements in paragraph 1;
 - 3. set the calculation of the adjusted notional as the crypto-asset's notional expressed in the reporting currency of each institution. Where a crypto-asset is priced in another crypto-asset, the institution shall apply the larger of the two adjusted notionals. If pairs to the reporting currency are not liquidly traded, the most liquid currency shall be taken with FX spot rates against the reporting currency.

Explanatory text for consultation purposes

The Basel standard (SCO60.98(2)(e)) recalls that the calculation methodology of the delta-adjustment and the maturity factor for crypto-assets are the same as for other risk categories. Also, the Basel standard (SCO60.98(2)(f)) recalls that that the aggregation of the PFE add-ons for hedging sets within the risk category 'crypto-assets' is the same as for other risk categories.

No deviations from the 'standard' rules are permitted and no further details on how to specifically reflect the features of crypto-assets



when calculating the RC are provided, therefore there was no need to include in these draft RTS a similar provision.

- ii. Institutions shall not use the internal model method or the simplified standardised approach for the calculation of their own funds requirements for counterparty credit risk for derivatives on crypto-assets;
- c. where a netting set contains derivatives on traditional assets or crypto-assets referred to in Article 501d(2), point (a) or (b) of Regulation (EU) No 575/2013, and derivatives underlying crypto-assets referred to in Article 501d(2), point (c), of Regulation (EU) No 575/2013 institutions can assign the crypto-assets referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013 in their own separate netting set and apply the risk weight referred to in paragraph 2 of this Article to this separate netting set.
- 4. Institutions shall calculate the exposure for market risk for crypto-assets referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013 that meet the criteria of paragraph 1 of this Article by applying the rules set out for traditional assets in Part Three, Title IV of Regulation (EU) No 575/2013, with the following specifications:
 - a. where institutions calculate the own funds requirements for market risk on the basis of the approach set out in Part Three, Title IV, Chapters 2, 3 and 4, and Article 325(2) of Regulation (EU) No 575/2013, they shall:
 - i. determine the own funds requirements for the position risk of the crypto-assets separately from the own funds requirements for position risk of other instruments that are or reference traditional assets assigned to the trading book;
 - ii. include in the scope of the calculation referred to in point (i) all instruments that are affected by changes in prices of crypto-assets, inclusive of derivatives and off-balance sheets positions;
 - iii. first express each crypto-asset position in terms of its quantity, and then convert it at the current spot price into the institution's reporting currency;
 - iv. identify their gross long and short positions in the crypto-asset separately for every market and exchange where they are traded. Institutions may offset gross long and gross short positions in a crypto-asset traded in the same market or exchange, where those positions arise from the products listed in paragraph 1, point (a), of this Article;
 - v. determine a net position for each crypto-asset *k* based on the following formula:

Net $position_k = max [long position_k, abs(short position_k)] - 0.65 * Min [Long position_k, abs(short position_k)]$

where institutions may net positions arising from the products listed in paragraph 1, point (a), for a crypto-asset traded in different markets and exchanges. Crypto-asset positions arising from products other than those listed in paragraph 1, point (a), shall be subject to the capital requirements set out in paragraph 6 of this Article;

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- vi. determine the own funds requirement for position risk of the cryptoasset k as 100% of its respective net position;
- vii. determine the aggregated own funds requirements for position risk of crypto-assets as the simple sum of the own funds requirements for the different crypto-assets;
- viii. determine the own funds requirements for the non-delta risk of options with a crypto-asset as their underlying on the basis of the scenario matrix approach in accordance with Articles 7 to 9 of Commission Delegated Regulation (EU) No 528/2014¹⁹, by using $\pm 100\%$ for the underlying price change and $\pm 100\%$ for the relative volatility change;
- ix. Apply, by derogation from Article 325(2) of Regulation (EU) 575/2013, a scaling factor of 1 to the total own funds requirements for the position risk of crypto-assets, consisting of the sum of the aggregated own funds requirement for positions risk referred to in point (vii) and the own funds requirement for the non-delta risk of options referred to in point (viii).
- b. Where institutions calculate the own funds requirements for market risk on the basis of the approach set out in Part Three, Title IV, Chapter 1a, of Regulation (EU) No 575/2013, they shall determine the own funds requirements for delta, vega and curvature risks in accordance with the following specifications:
 - i. they shall create a separate risk class 'crypto assets' and assign all risk factors, including those related to derivatives and off-balance sheets positions that are affected by changes in prices of the crypto-assets to this risk class;
 - ii. they shall first express each applicable crypto-asset position in terms of its quantity, and then convert it at the current spot price into the institution's reporting currency;
 - iii. they shall identify their positions in the crypto-asset separately for each different market and exchange where the crypto assets are traded, and shall calculate separate long and short gross sensitivities;
 - iv. they shall include only positions arising from the products listed in paragraph 1, point (a) of this Article in the scope of the calculation set out in this paragraph. Positions arising from products other than those listed in paragraph 1, point (a) of this Article, that reference crypto-assets shall be subject to the calculation of own funds requirements set out in paragraph 6 of this Article;
 - v. They shall determine the sensitivities to crypto-asset delta risk factors for instruments that are sensitive to crypto-assets separately for every

¹⁹ Commission Delegated Regulation (EU) No 528/2014 of 12 March 2014 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for non-delta risk of options in the standardised market risk approach.



crypto-asset based on a risk factor structure with the following two dimensions:

- 1. market or exchange; and
- 2. time to maturity, at the following tenors: 0 years, 0.25 years, 0.5 years, 1 year, 2 years, 3 years, 5 years, 10 years, 15 years, 20 years and 30 years;
- vi. they shall determine the sensitivities to crypto-asset vega risk factors for options with underlyings that are sensitive to crypto-assets as the implied volatilities of the crypto-asset price, mapped to one or more of the following maturities of the option: 0.5 years, 1 year, 3 years, 5 years and 10 years;
- vii. they shall calculate the delta risk sensitivity as follows:

$$S_k = \frac{[V_i(1.01 \cdot crypto(Ga)_k) - V_i(crypto(Ga)_k)]}{0.01}$$

where:

- 1. *k* is a given crypto-asset;
- 2. $crypto(Ga)_k$ is the market value of the crypto-asset k; and
- 3. V_i is the market value of instrument *i* as a function of the price of the crypto-asset *k*.
- viii. They shall determine the option-level vega risk sensitivity to a given crypto-asset in accordance with Article 325s of Regulation (EU) 575/2013;
 - ix. they shall assign the sensitivities to the applicable bucket of therisk class 'crypto-assets' which consist of n buckets and where each bucket corresponds to a specific crypto-asset
 - x. They shall risk weight the sensitivities to crypto-assets by 100%;
 - xi. they shall apply the correlation parameter ρ_{kl} between two weighted sensitivities WS_k and WS_l within the same bucket b as $\rho_{kl}=94\%$;
- xii. they shall calculate the bucket-specific delta and vega sensitivities, *K* for bucket b as follows:

$$K_{b} = \sqrt{\max\left(0, \sum_{k} WS_{k}^{2} + \sum_{k} \sum_{k \neq l} \rho_{kl} \cdot WS_{k} \cdot WS_{l}\right)}$$

- xiii. they shall determine the risk-class specific own funds requirement for delta or vega risk, as applicable, as a simple sum of the bucket-specific delta or vega sensitivities $\sum_{b} K_{b}$
- xiv. They shall determine the own funds requirements for the curvature risk on the basis of the same buckets specified for the delta risk in item ix. For the calculation of the curvature sensitivities all tenors shall be shifted in parallel without the application of a term structure decomposition. Institutions shall calculate the net own funds requirements for curvature risk for the risk factor k for a crypto-asset, by

applying a relative shift equal to the delta risk weight as the curvature risk weight;

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xv. apply the following formular for the aggregation of the curvature risk positions within a bucket b:

 $K_{b} = max(K_{b}^{+}, K_{b}^{-}), where$ $K_{b}^{+} = \sum_{k} max(CVR_{k}^{+}, 0)$ $K_{b}^{-} = \sum_{k} max(CVR_{k}^{-}, 0)$

- xvi. determine the risk class-specific own funds requirements for curvature risk as the simple sum of the bucket-specific curvature risk $\sum_{b} K_{b}$ xvii. not calculate any own funds requirements for default risk;
- c. Institutions shall not use the alternative internal model approach set out in Part Three, Title IV, Chapter 1b of Regulation (EU) No 575/2013 to determine own funds requirements for the crypto assets;
- d. If an asset-referenced token ('ART') is subject to the calculation of own fund requirements for market risk in this paragraph, institutions shall treat the risk of default of the issuer of this crypto-asset in line with the minimum riskbased own funds requirements for credit risk, in case the issuer of the cryptoasset is unable to meet the permanent right of redemption set out in Article 39 of Regulation (EU) No 2023/1114;

Questions

Q7: For ARTs subject to the calculation of own fund requirements for market risk in this paragraph, do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of these draft RTS during the transitional period as per Article 3(4)(d) or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.

- 5. Institutions shall calculate the own funds requirements for credit valuation adjustment risk for derivatives and securities financing transactions referencing crypto-assets referred to in Article 501d(2), point (c) of Regulation (EU) No 575/2013, that meet the hedging recognition criteria laid down in paragraph 1 of this Article following the same rules as for derivatives and securities financing transactions on traditional assets laid down in Articles 382 to386 of Regulation (EU) No 575/2013.
- 6. The own funds requirements for crypto-assets as referred to in Article 501d(2), point (c)of Regulation (EU) No 575/2013 that do not meet the criteria laid down in paragraph 1 of this Article shall be determined as follows:
 - a. institutions shall include in the calculation all their trading book and nontrading book crypto-assets exposures;



b. institutions shall determine a risk weighted exposure amount for each cryptoasset by applying the following formula:

 $RWEA = RW \cdot max[abs(long exposure), abs(short exposure)]$

Where RW = 1250%;

With the formula set out in point (c) institutions shall also apply the 1,250% risk weight to short positions held by themselves;

- c. where institutions apply Article 274(2) of Regulation (EU) No 575/2013 to calculate the exposure of a derivative on a crypto-asset for the purposes of point (b), they shall meet the following requirements:
 - i. netting for the calculation of the replacement cost in accordance with Article 275 of Regulation (EU) 575/2013, is only permitted within eligible and enforceable netting sets between exposures of the same crypto-assets underlying derivatives;
 - ii. the PFE set out in Article 278 of Regulation (EU) 575/2013 is calculated separately for each transaction as 50% of the gross notional amount. Crypto-assets shall not be part of any hedging set;
 - iii. netting sets containing derivatives referencing crypto-assets and other asset transactions are split, so that the resulting sets contain either only the derivatives referencing the crypto-assets or derivatives referencing the other asset transactions;
- d. institutions shall reflect the leverage of crypto-assets underlying a derivative that is leveraged or otherwise enhanced by the structure of the transaction by adjusting upwards the exposure calculated according to point (c) and applied in the formula in point (b). The exposure calculated according to this point shall be capped at the maximum possible loss on the crypto-asset derivative contract.
- Crypto-assets referred to in Article 501d.2, point (c) of Regulation (EU) No 575/2013, shall not be recognised as eligible forms of collateral for the purpose of credit risk mitigation set out in Article 108 of Regulation (EU) No 575/2013.

Article 4

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

5.1 Draft cost-benefit analysis / impact assessment

- 27. According to Articles 10 of Regulation (EU) No 1093/2010 (EBA Regulation), the EBA shall analyse the potential costs and benefits of draft regulatory standards (RTS) developed by the EBA. These draft RTS and the ITS developed by the EBA shall therefore be accompanied by an Impact Assessment (IA) that analyses 'the potential related costs and benefits.'
- 28. This analysis presents the IA of the main policy options included in this Consultation Paper (CP) on these draft RTS on the calculation and aggregation of crypto exposure values under Article 501d(5) of the CRR.
- 29.Regulation (EU) 2024/1623 amending Regulation (EU) No 575/2013 (CRR 3) includes a transitional prudential treatment for crypto-assets exposure. According to 501d(1) of the CRR 3, by 30 June 2025, the Commission shall, where appropriate, submit a legislative proposal to the European Parliament and to the Council to introduce a dedicated prudential treatment for crypto-asset exposures, taking into account the international standards and MiCAR. These draft RTS included in this consultation paper are intended to describe the treatment of crypto-assets exposures in this transition period until the date of application of the dedicated legislation.

A. Problem identification

- 30. During the transition period, when no treatment for crypto assets is defined, credit Institutions can have exposure to crypto-assets and may calculate the necessary own funds requirements in their own way for aspects not covered with CRR3 or MiCAR. This can impose significant risks for the financial stability by not having a harmonized approach of quantifying the crypto-exposures risk and evaluation for the own reserves.
- 31. Therefore, these draft RTS sets out a treatment of crypto-assets exposures during the transition, until a dedicated legislation setting out the details on the treatment of crypto-assets exposures on a permanent basis has become applicable. These draft RTS are also important to ensure that the industry has clarity on how the crypto assets are treated.

B. Policy objectives

32. The general objective of these draft RTS is to specify the way, credit institutions calculate their exposures to crypto-assets. These draft RTS also aim to ensure consistency with the Basel standard on the prudential treatment of banks' exposures to crypto-assets and MiCAR.



C. Baseline scenario

33. The baseline scenario is the situation where CRR3 and MiCAR only provides a general calculation of some of crypto-exposures credit institutions may have in their banking or trading book.

In addition, since no previous regime exist in this area, harmonization is required to avoid diverging approaches and different practices on the methodology used for the calculation of the crypto-exposures and especially in different aspects of credit, marketD. Options considered

FAIR VALUE VS PRUDENT VALUATION

- 34.It is important to have accurate valuation of crypto-asset exposure to ensure the correct calculation of the own funds' requirements for exposures to crypto-assets.
- 35. The availability of reliable and continuous pricing data is not common to many crypto-assets due to limited volume and/or frequency of transactions, or the lack of transparency provided by exchanges or private venues where the crypto-assets are traded. Furthermore, crypto-assets are in general traded on unregulated marketplaces and prices may differ quite materially from one trading venue to another.
- 36.In this regard, two options were considered for their valuation.

Option 1. Do not use prudent valuation for crypto assets

- 37.Such an approach would be in line with the legal reading of the current legislation. Article 34 and Article 105 of the CRR imply that the prudent valuation requirements apply to all fair-valued positions regardless of whether they are held in the trading book or not, where the term 'positions' refers solely to financial instruments and commodities. Crypto-assets within the scope of MiCAR are neither financial instruments nor commodities and therefore would be excluded from this treatment.
- 38. Moreover, at the moment no international accounting standards exists on crypto-assets to specify the correct valuation.
- 39. The drawback of this approach is that the valuation of crypto-assets will not be reliable.

Option 2 use Fair value according to Article 105 of the CRR

40.Due to the high volatility and price uncertainty, as well as limited data, applying prudential valuation to crypto assets prices seems more appropriate. This option ensures that all relevant crypto-assets should be captured by Article 105 of Regulation (EU) No 575/2013 which establishes the requirements for prudent valuation of fair valued positions in trading book, even though crypto assets are technically not in the scope of this article.



ALIGNMENT WITH BASEL VS ADJUSTED APPROACH BASEL CATEGORISATION VS MICAR VS MIXED APPROACH (MAPPING)

- 41.Due to differing categorization of crypto assets, a full alignment with then Basel standard is challenging. Using the Basel categorization only would make these draft RTS non-compliant with level 1 text. An alternative approach is to only further develop the treatment RWA treatment specified in level 1 using the categories of crypto assets defined by MiCAR. Such an approach however would ensure deviation from Basel.
- 42. Given that in the long-term it is expected that the legislation aims to comply with Basel rules, a third approach combines the two categorizations, by mapping the CRR categories to the Basel ones, and combining the categorization from level 1 with the prudential treatment specified in the Basel standard makes sense. Such an approach is more complex but ensures more alignment with the Basel standard.

E. Cost-Benefit Analysis

43.Overall, the costs of the implementation of these draft RTS are assessed as medium, as some banks will need to set up a new way of calculating the own funds requirement, given the lack of regime in this area until now. However, this approach is expected to continue also in the future, so the costs can be considered inevitable, and in fact may simply anticipate costs that would have come with the COM legislative proposal. The benefits on the other hand are significant as, first they provide clarity to the institutions on the treatment of crypto assets, and, second, reduces the risk for financial stability by not having a harmonized approach of quantifying the crypto-exposures risk and evaluation for the own funds reserves



5.2 Overview of questions for consultation

Q1: Do you agree that fair-valued crypto-assets within the scope of MiCAR should be included within the scope of the prudent valuation rules? If not, please explain.

Q2: Do you have any concern in relation to the application of the requirements specified in Article 105 CRR and Delegated Regulation (EU) 2016/101(RTS on Prudent Valuation) to crypto-assets? If so, please explain.

Q3: Do you agree that a one-size fits all RW of 250% should apply also to CCR transactions requiring specifications on netting set treatment (Alternative A) or do you prefer using the counterparty's RW as is standard in CCR (Alternative B)? Please briefly justify your assessment.

Q4: Are there any credit institutions considering implementing the alternative internal model approach during the transitional period, or consider implementing it in the medium to long term? Would there be an impact for the development of the crypto-assets market in the EU, and/or for the capitalisation and/or business activities of European credit institutions, if the use of the alternative internal models approach in the short to medium term is not permitted?

Q5: Do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of this draft RTS during the transitional period or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.

Q6: How relevant is it to incorporate this differentiation for crypto-assets exposures referred to in Article 501d (2), point (c), of the CRR at this stage? Are institutions confident that they can assess their crypto-assets exposures against the criteria set out in these draft RTS? Is there sufficient market data available to make those assessments?

Q7: For ARTs subject to the calculation of own fund requirements for market risk in this paragraph, do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of these draft RTS during the transitional period as per Article 3(4)(d) or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.