Consultation Paper

Technical Standards specifying certain requirements of Markets in Crypto Assets Regulation (MiCA) - second consultation paper

Responding to this paper

ESMA invites comments on all matters in this paper and in particular on the specific questions summarised in Annex I. Comments are most helpful if they:

- respond to the question stated;

- indicate the specific question to which the comment relates;

- contain a clear rationale; and

- describe any alternatives ESMA should consider.

ESMA will consider all comments received by **14 December 2023.**

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

Publication of responses

All contributions received will be published following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publicly disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from us in accordance with ESMA's rules on 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 ESMA's Board of Appeal and the European Ombudsman.

Data protection

Information on data protection can be found at www.esma.europa.eu under the heading 'Data protection'.

Who should read this paper?

All interested stakeholders are invited to respond to this consultation paper. In particular, ESMA invites crypto-asset issuers, crypto-assets service providers, financial entities dealing with crypto-assets as well as any stakeholders that have an interest in the market for crypto-assets.

List of acronyms

AIF	Alternative investment fund
ART	Asset-referenced token
CASP	Crypto-asset service provider
DLT	Distributed ledger technology
EBA	European Banking Authority
EMT	Electronic money token
ESMA	European Securities and Markets Authority
ESAs	European Supervisory Authorities
ICT	Information and communications technology
ITS	Implementing technical standards
MiCA	Regulation (EU) 2023/1114 of the European Parliament and the Council of 31 May 2023 on markets in crypto-assets (MiCA)
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II)
NCA	National competent authority
RTS	Regulatory technical standards
UCITS	Undertakings for collective investments in transferable securities

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1 Executive Summary

Reasons for publication

The Regulation on markets in crypto-assets (MiCA) was published in the Official Journal of the EU on 9 June 2023. The European Securities and Markets Authority (ESMA) has been empowered to develop technical standards and guidelines specifying certain provisions. ESMA published the first of three consultation packages in July 2023. This second consultation package includes all remaining mandates with a 12-month deadline. The third and final consultation package is expected to be published in Q1 2024. The aim of these public consultations is to collect views, comments, and opinions from stakeholders and market participants on the appropriate implementation of MiCA.

Contents

This consultation paper contains six sections (chapters 3 – 8) relating to (i) the content, methodologies and presentation of sustainability indicators and adverse impacts on climate; (ii) continuity and regularity in the performance of CASP services; (iii) offering pre- and post-trade data to the public; (iv) content and format of order book records and record keeping by CASPs; (v) machine readability of white papers and the register of white papers; and (vi) the technical means for appropriate public disclosure of inside information.

Next Steps

ESMA aims to close the public consultation respecting legal deadlines as set out in MiCA. ESMA will consider the feedback received during this consultation and expect to publish a final report and submit the draft technical standards to the European Commission for endorsement by June 2024.

2 Introduction

1. On 24 September 2020, the European Commission adopted a legislative proposal for Regulation on Markets in Crypto-assets and amending Directive (EU) 2019/1937.

2. The Regulation on Markets in Crypto-assets (MiCA)[1] was published in the Official Journal on 9 June 2023 and entered into force on 29 June 2023.

3. MiCA requires ESMA to develop a series of RTS, ITS and Guidelines, in close cooperation with the EBA. This second consultation package covers six draft RTS and two draft ITS on: (i) content, methodologies and presentation of sustainability indicators on adverse impacts on the climate and the environment (RTS); (ii) measures that crypto-asset service providers must take to ensure continuity and regularity in the performance of services (RTS); pre- and post-trade transparency data to be made public (RTS); (iii) content and format of order book records (RTS); (iv) record-keeping by crypto-asset service providers (RTS); (v) data necessary for the classification of white papers (RTS); (vi) standard forms and templates for the crypto-asset white paper (ITS); (vii) technical means for appropriate public disclosure of inside information (ITS).

4. These technical standards should be submitted by ESMA to the European Commission by 30 June 2024.

5. While this Consultation Paper does not include a draft cost-benefit analysis, ESMA has developed its draft RTS and ITS having due regard to the principle of proportionality and being mindful about the possible costs the obligations they contain would create for market participants. ESMA considers that the provisions included in the draft RTS and ITS in the Annex of this paper do not create new costs for concerned market stakeholders beyond the ones that naturally stem from the Level 1 obligations. Nevertheless, respondents are invited to highlight in their response any specific concerns the ESMA proposals could raise for them in terms of their associated costs.

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[1] Regulation (EU) 2023/1114 of the European Parliament and the Council of 31 May 2023 on markets in crypto-assets (OJ L 150, 9.6.2023, p. 40–205)

3 Content, methodologies and presentation of sustainability indicators on adverse impacts on the climate and the environment

3.1 Background

Recital (7)

"The consensus mechanisms used for the validation of transactions in crypto-assets might have principal adverse impacts on the climate and other environment-related adverse impacts. Such consensus mechanisms should therefore deploy more environmentally-friendly solutions and ensure that any principal adverse impact that they might have on the climate, and any other environment-related adverse impact, are adequately identified and disclosed by issuers of crypto-assets and crypto-asset service providers. When determining whether adverse impacts are principal, account should be taken of the principle of proportionality and the size and volume of the crypto-asset issued. The European Supervisory Authority (European Securities and Markets Authority) (ESMA) established by Regulation (EU) No 1095/2010 of the European Parliament and of the Council, in cooperation with the European Supervisory Authority (European Banking Authority) (EBA) established by Regulation (EU) No 1093/2010 of the European Parliament and of the Council, should therefore be mandated to develop draft regulatory technical standards to further specify the content, methodologies and presentation of information in relation to sustainability indicators with regard to adverse impacts on climate and other environment-related adverse impacts, and to outline key energy indicators. The draft regulatory technical standards should also ensure coherence of disclosures by issuers of crypto-assets and by crypto-asset service providers. When developing the draft regulatory technical standards, ESMA should take into account the various types of consensus mechanisms used for the validation of transactions in crypto-assets, their characteristics and the differences between them. ESMA should also take into account existing disclosure requirements, ensure complementarity and consistency, and avoid increasing the burden on companies."

Article 6(12) of MiCA

"ESMA, in cooperation with EBA, shall develop draft regulatory technical standards on the content, methodologies and presentation of the information referred to paragraph 1, first subparagraph, point (j), in respect of the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts.

When developing the draft regulatory technical standards referred to in the first subparagraph, ESMA shall consider the various types of consensus mechanisms used to validate transactions in crypto-assets, their incentive structures and the use of energy,

renewable energy and natural resources, the production of waste and greenhouse gas emissions. ESMA shall update those regulatory technical standards in the light of regulatory and technological developments."

Article 19 (11) of MiCA

"*ESMA, in cooperation with EBA, shall develop draft regulatory technical standards on the content, methodologies and presentation of information referred to in paragraph 1, first subparagraph, point (h) in respect of the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts.*

When developing the draft regulatory technical standards referred to in the first subparagraph, ESMA shall consider the various types of consensus mechanisms used to validate transactions in crypto-assets, their incentive structures and the use of energy, renewable energy and natural resources, the production of waste and greenhouse gas emissions. ESMA shall update those regulatory technical standards in the light of regulatory and technological developments."

Article 51 (15) of MiCA

"*ESMA, in cooperation with EBA, shall develop draft regulatory technical standards on the content, methodologies and presentation of the information referred to in paragraph 1, point (g), in respect of the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts.*

When developing the draft regulatory technical standards referred to in the first subparagraph, ESMA shall consider the various types of consensus mechanisms used to validate transactions in crypto-asset, their incentive structures and the use of energy, renewable energy and natural resources, the production of waste, and greenhouse gas emissions. ESMA shall update the regulatory technical standards in the light of regulatory and technological developments.

ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 30 June 2024.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph of this paragraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010."

Article 66(6) of MiCA

> "*ESMA, in cooperation with EBA, shall develop draft regulatory technical standards on the content, methodologies and presentation of information referred to in paragraph 5 in respect of the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts.*
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> *When developing the draft regulatory technical standards referred to in the first subparagraph, ESMA shall consider the various types of consensus mechanisms used to validate crypto-asset transactions, their incentive structures and the use of energy, renewable energy and natural resources, the production of waste and greenhouse gas emissions. ESMA shall update the regulatory technical standards in the light of regulatory and technological developments.*
>
> *ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 30 June 2024.*
>
> *Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph of this paragraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.*"

5. Articles 19(1), 51(1) and 6(1) of MiCA respectively introduce disclosure requirements related to principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to issue the crypto-asset, as part of the white papers for asset-referenced tokens (ARTs), for e-money tokens (EMTs) and for crypto-assets other than ARTs and EMTs. These disclosure requirements apply to persons drawing up the crypto-asset white paper referred to in Articles 6, 19 or 51 of MiCA. In particular, operators of trading platforms shall ensure by 31 December 2027 that a crypto-asset white paper is drawn up, notified, and published in relation to crypto-assets other than ARTs and EMTs that were admitted to trading before 30 December 2024. For ease of reference, they will be referred to as 'persons drawing up crypto-asset white papers' throughout this consultation paper.

6. Article 66(5) also requires Crypto-Asset Service Providers (CASPs) to make such information available in a prominent place on their website for all the crypto-assets in relation to which they provide services, regardless of whether the information can be obtained from white-papers.

7. Articles 6(12), 19(11), 51(15) and 66(6) require ESMA to specify the content, methodologies, and presentation of the information in respect of the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts, taking into consideration the various types of consensus mechanisms used to validate transactions in crypto-assets (including their characteristics and the differences between them) and their incentive structures. Such sustainability indicators should cover the use of energy, renewable energy and natural resources, the production of waste and greenhouse gas emissions.

3.2 Assessment

3.2.1 Description of the consensus mechanisms

8. The mentions of consensus mechanisms in MiCA refer indifferently to the issuance of crypto-assets and the validation of transactions in crypto-assets. ESMA understands that the primary objective of a consensus mechanism is to validate transactions in crypto-assets, and that the issuance of a crypto-asset can be the ultimate result of this operation of validation.

9. For the purpose of assessing the sustainability impacts of the consensus mechanisms, it is therefore suitable to focus on the validation of transactions in crypto-assets, as per the definition of 'consensus mechanism' in article 3(1)(3) of MiCA, and to assume that this validation is conflated with the issuance of a crypto-asset.

10. A description of the consensus mechanism(s) used to validate the transactions, and its/their incentive structures, is the starting point for persons drawing up crypto-asset white papers and for CASPs to better articulate their sustainability impacts.

11. The policy discussions at the time of the political agreement on MiCA were largely focused on the comparative impacts of the incentive structures linked to Proof of Work and Proof of Stake mechanisms. Proof of Work consensus mechanisms, typically associated with incentives based on the use of computing power, can be deemed more impactful from a sustainability point of view. However, disclosure requirements should not be limited to a specific sub-set of consensus mechanisms but should capture all current and future types of consensus mechanisms. Consensus mechanisms will be identified in the part of the white papers on information on the underlying technology, as prescribed in Annexes I, II and III of MiCA.

12. Assessing the sustainability impacts of consensus mechanisms is understood as assessing the cumulative sustainability impacts of the set of DLT network nodes active in reaching an agreement that a transaction is validated.

13. The sustainability impacts of consensus mechanisms are not only linked to the validation of transactions, but also to the use of energy and resources needed to maintain the integrity of the information stored on the ledger. As certain crypto-assets rely on a multi-layered structure encompassing different types of consensus mechanisms, the sustainability impacts of each consensus mechanism used in the different layers should be properly assessed and disclosed accordingly.

3.2.2 Data availability and reliability

14. Sustainability disclosures are an integral part of the MiCA rulebook, and full compliance with these disclosure requirements will be expected from all entities wishing to engage

in the issuance, offer to the public and admission to trading of crypto-assets and in the provision of services related to crypto-assets in the Union.

15. ESMA recognises the challenges associated with collecting granular data on sustainability matters in light of the global and decentralised nature of activities related to crypto-assets, in particular for public and permissionless consensus mechanisms. These challenges are by and large similar to the challenges that entities in scope of the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR) face, some of which may be persons drawing up crypto-asset white papers or authorised as CASPs in the future.

16. ESMA also notes that a growing number of entities active in crypto-asset markets are voluntarily disclosing information on their sustainability impacts, including comparisons between crypto-assets, and using third-party sources to draw up such sustainability statements.

17. Based on an initial analysis of the academic body of research to date and of the methodologies currently used by providers of sustainability data in relation to crypto-assets, ESMA considers that the sustainability impact of the consensus mechanisms can be anchored in three main features of the DLT network nodes: 1) the energy consumption of each DLT network node; 2) their location; and 3) the devices that each DLT network node uses both to take part in the DLT network, such as application-specific integrated circuits (ASICs), and to hold a replica of records of all transactions on a distributed ledger, including servers and equipment used to maintain their integrity.

19. In particular, the location of the DLT network nodes may be used as a proxy to estimate greenhouse gas (GHG) emissions, while the waste production and the use of natural resources throughout the lifecycle (production, use and disposal) of the hardware equipment of each DLT network node can be assessed.

20. Persons drawing up crypto-asset white papers and CASPs will be expected to identify these main features and combine them with relevant datasets (e.g., on countries' energy mixes and on lifecycle assessments for hardware equipment), in order to obtain comparable and reliable assessments of the sustainability impact of consensus mechanisms.

3.2.3 Indicators, methodologies and presentation of the information

21. Early experiences from sustainability reporting requirements under CSRD and SFDR and initial feedback from external stakeholders indicate that comparability is best ensured with indicators based on harmonised quantitative metrics, as opposed to qualitative disclosures.

22. Such quantitative metrics should be anchored in common methodological principles, inspired from existing CSRD and SFDR frameworks and relevant international initiatives. Further work is foreseen at the EU level on these methodologies, including

through a call for tender on 'Developing a Methodology and Sustainability Standards for Mitigating the Environmental Impact of Crypto-assets' launched in September 2023[2].

23. Sustainability disclosure requirements are an integral part of the requirements to draw up white papers, and as such will be covered by the requirements on the presentation of the information in the relevant ITS under Articles 6(11), 19(10) and 51(10).

24. It is necessary to further specify how the information on sustainability indicators will be presented on the website of CASPs, as this is not extensively covered in MiCA.

Q1: Do you agree with ESMA's assessment of the mandate for sustainability disclosures under MiCA?

Q2: In your view, what features of the consensus mechanisms are relevant to assess their sustainability impacts, and what type of information can be obtained in relation to each DLT network node?

3.3 Proposal

3.3.1 Coherence, complementarity, consistency and proportionality

25. The three mandates on sustainability indicators for crypto-asset white papers are identical in substance and the mandate on sustainability indicators on CASPs' websites is closely linked to the information included in crypto-asset white papers. ESMA proposes to bundle these four mandates into one single RTS.

26. While these common standards are an important step to foster coherence of disclosures, persons drawing up crypto-asset white papers and CASPs are also expected to cooperate to ensure such coherence overtime. In particular, disclosures should be compared with each other in regular reviews, and updated accordingly.

27. The definitions and concepts in the MiCA disclosure requirements are aligned, to the extent possible, with rules in respect of the CSRD and the SFDR, to ensure complementarity and consistency with existing sustainability disclosure requirements, notably as some persons drawing up crypto-asset white papers and CASPs may also be subject to these rules.

28. Proportionality is already embedded in these requirements from the outset, as only a limited subset of sustainability matters is to be taken into account in the MiCA disclosure requirements compared to the CSRD and SFDR frameworks. In addition, ESMA proposes that indicators are only made mandatory when they can be considered the most conducive to investor awareness on the impact of consensus mechanisms

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[2] https://etendering.ted.europa.eu/cft/cft-display.html?cftId=15551

(notably when sustainability data is more readily available), with additional indicators identified for optional disclosures. Finally, the draft RTS include the possibility for entities subject to disclosure requirements to benefit from a best effort clause in case of limited data availability.

Q3: Do you agree with ESMA's approach to ensure coherence, complementarity, consistency and proportionality?

3.3.2 Data availability and reliability

29. ESMA recognises that sustainability data with respect to consensus mechanisms may not be fully available when MiCA applies. In addition to the best effort clause, ESMA therefore proposes that entities subject to disclosure requirements can rely on estimates where data is not readily available, based on general principles specified in the draft RTS.

30. The use of estimates may be relevant both for new crypto-assets, allowing to estimate information for (part of) their first calendar year of issuance, and for existing crypto-assets, notably as operators of trading platforms will be expected to ensure that a crypto-asset white paper is drawn up for crypto-assets other than ARTs and EMTs admitted to trading before 30 December 2024.

40. ESMA also proposes that the use of third parties to review sustainability disclosures is indicated in white papers and on CASPs' websites, in line with the approach applicable to disclosures related to the taxonomy on EU sustainable activities in the SFDR RTS.

41. One of the objectives of this Consultation Paper is to clarify expectations on requirements for sustainability indicators related to consensus mechanisms used to validate transactions in crypto-assets. This will incentivise the availability of more granular data, and in turn improve the reliability of indicators and estimates.

42. In addition, ESMA invites persons drawing up crypto-asset white papers and CASPs to increase their coordination in anticipation of the application of MiCA, in order to foster consistent implementation of the sustainability disclosures across the board, notably when the same crypto-asset is admitted to trading on different trading platforms.

Q4: Do you agree with ESMA's approach to mitigating challenges related to data availability and reliability? Do you support the use of estimates in case of limited data availability, for example when data is not available for the entirety of a calendar year?

Q5: What are your views on the feasibility and costs of accessing data required to compute the sustainability metrics included in the draft RTS?

3.3.3 Indicators, methodologies and presentation of the information

43. ESMA proposes a targeted set of mandatory disclosures (Table 1 of the Annex of the draft RTS), with a limited number of quantitative metrics on the consumption of energy, scope 1 and scope 2 GHG emissions and the production of waste, together with a qualitative statement on the impact of use of equipment by DLT network nodes on natural resources. Specific attention is paid to key indicators, defined as energy consumption, energy intensity and GHG emissions.

44. In practical terms, persons drawing up crypto-asset white papers and CASPs will be required to i) identify the consumption of energy of the DLT network nodes used to validate transactions in the crypto-assets, ii) calculate the GHG emissions related to energy sources owned and controlled, or purchased by these DLT network nodes, based on the location of the DLT network nodes, and iii) infer the production of waste and the use of natural resources from an analysis of the production, use and disposal of the devices of the DLT network nodes.

45. ESMA also proposes that persons drawing up crypto-asset white papers and CASPs willing to take extra steps make use of suggested optional indicators (Table 2 of the Annex of the draft RTS). Such additional disclosures may include granular information on the energy mix and the carbon intensity of the energy used, on GHG emissions linked to the value chain of DLT network nodes (scope 3), on the generation and recycling of all types of waste and the waste intensity of each transaction, and on the use and recycling of water by DLT network nodes, as well as more details on the reduction targets for energy, GHG emissions, waste and natural resources. Such optional indicators could be made mandatory in the medium-term, if they are considered to improve investor awareness.

46. With this first version of the draft RTS, ESMA sets out important milestones to develop consistent sustainability disclosures for crypto-assets, leveraging on established indicators and methodologies. In the short-term, the certainty provided in the draft RTS should enhance the availability of sustainability data in relation to crypto-assets ahead of the application of MiCA requirements by end 2024. In the medium-term, ESMA intends to suggest revisions to the RTS incorporating new findings in a fast-evolving field of research, and conclusions from forthcoming Commission reports. This dynamic approach will incrementally increase the scope of sustainability disclosures for crypto-assets.

47. While standardised methodologies on the proposed quantitative metrics cannot be provided at this stage, due to limited consensus in the research and crypto communities, the first version of the draft RTS is already catering for a harmonised approach on the assumptions that persons drawing up crypto-asset white papers and CASPs should take into account, including calculation guidance on certain sustainability metrics, anchored in the draft European Sustainability Reporting Standards (ESRS) specifying CSRD.

48. In addition, the use of estimates to calculate and present information on sustainability indicators may be allowed if the information is not otherwise readily available. ESMA will explore additional guidance on recommended methodologies and data sources based on the feedback received during the consultation.

49. Finally, ESMA proposes to include in the draft RTS general principles on the presentation of the information on the websites of CASPs, as well as a common template for sustainability disclosures (in the Annex of the draft RTS), to ensure comparability across CASPs and foster investor understanding. This template includes a specific focus on the key indicators described above.

Q6: Do you agree with ESMA's description on the practical approach to assessing the sustainability impacts of consensus mechanisms? If not, what alternative approach would you consider suitable to assess these impacts?

Q7: Do you agree with the definitions proposed in the draft RTS, in particular on incentive structure and on DLT GHG emissions? If not, what alternative wording would you consider appropriate?

Q8: In your view, are the proposed mandatory sustainability indicators conducive to investor awareness? If not, what additional or alternative indicators would you consider relevant?

Q9: Do you consider the proposed optional sustainability indicators fit for purpose? If not, what additional indicators would you consider relevant? Would you agree to making these optional sustainability indicators mandatory in the medium run?

Q10: Do you consider the principles for the presentation of the information, and the template for sustainability disclosures fit for purpose? If not, what improvements would you suggest?

Q11: In your view, are the calculation guidance for energy use and GHG emissions included in the draft European Sustainability Reporting Standards relevant for methodologies in relation to the sustainability indicators under MiCA ? If not, what alternative methodologies would you consider relevant? For the other indicators for which the calculation guidance of the ESRS was not available, do you consider that there are alternative methodologies that could be used? If so, which ones?

Q12: Would you consider it useful that ESMA provides further clarity and guidance on methodologies and on recommended data sources? If yes, what are your suggestions in this regard?

4 Continuity and regularity in the performance of crypto services

4.1 Background

> **Article 68(10)(a) of MiCA**:
>
> *"ESMA shall develop draft regulatory technical standards to further specify:*
>
> *(a) the measures ensuring continuity and regularity in the performance of the crypto-asset services referred to in paragraph 7;*
>
> *[…]*
>
> *ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 30 June 2024.*
>
> *Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph of this paragraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010."*

50. Chapter 2 of Title V in MiCA lists obligations for all crypto-asset service providers (CASPs), including specific governance arrangements listed under Article 68. These governance arrangements fall into the wider organisational requirements for CASPs described in Recital 81 of MiCA, which are aimed at ensuring market integrity.

51. As part of these governance arrangements for CASPs, Article 68(10)(a) of MiCA mandates ESMA to develop regulatory technical standards (RTS) to further specify the "measures" that CASPs must take to ensure continuity and regularity in the performance of the crypto-asset services referred to in paragraph 7 of the same article.

53. Paragraph 7 of Article 68 imposes requirements on CASPs to take all reasonable steps to ensure continuity and regularity in the performance of their crypto-asset services by employing appropriate and proportionate procedures to ensure resilient and secure ICT systems, as required by Regulation (EU) 2022/2554 (henceforth DORA). They must establish a Business Continuity Policy (BCP), which includes ICT business continuity plans as well as ICT response and recovery plans that aim to ensure—in case of interruption to their ICT systems and procedures—the preservation of essential data and functions, and the maintenance or timely recovery of crypto-asset services.

4.2 Assessment

54. It is ESMA's view that these business continuity requirements should contribute to the maintenance of orderly markets by limiting, to the extent possible, undue losses for clients of CASPs in the event of a disruptive incident. The measures which CASPs are required to take should therefore be adequate to address any new operational or security risks posed by CASP-specific business models.

55. For the broader mandate requiring that CASPs take "reasonable steps to ensure continuity and regularity in the performance of their crypto-asset services", ESMA has relied on standard Business Continuity Management (BCM) requirements found in existing regulations as a guide. Specifically, ESMA finds two RTS under MiFID II (for investment firms, and trading venues) to be relevant for the non-ICT specific areas of the mandate: Commission Delegated Regulation (EU) 2017/589 and Commission Delegated Regulation (EU) 2017/584. Both of these Delegated Regulations elaborate general principles for business continuity arrangements for the respective entities and activities under scope (as well as targeted requirements specific to the underlying services).

56. Of these two RTS in MiFID II, the most applicable inspiration for the mandate is RTS 2017/584 on trading venues[3]. Specifically, this RTS requires trading venues to have effective business continuity arrangements to address disruptive incidents and ensure that their trading systems have sufficient stability. Article 16 of the RTS requires trading venues to establish a business continuity plan with procedures to 1) address adverse scenarios relating to a disruptive event (e.g., failure of an algorithmic trading system), 2) relocate the trading system to a back-up site, and 3) back-up critical business data to resume trading (within two hours). The MiFID II business continuity policy outlines governance requirements for senior management to establish clear objectives and strategies in terms of business continuity, such as (i) allocating adequate resources, (ii) approving, and maintaining amendments to the business continuity policy, and (iii) establishing a dedicated business continuity function within the organisation.

57. For the purposes of this draft RTS, ESMA believes the precedents for business continuity found in the relevant MiFID II RTS should address many of the risks and challenges present in CASP business models. However, ESMA believes that some deviations or clarifications are necessary to both maintain a principles-based approach as it relates to "measures" in the mandate as well as addressing novel risks associated with crypto-assets.

58. Since the MiCA mandate is limited to "measures ensuring continuity and regularity of services", and ESMA is wary of placing obligations on CASPs beyond what is implied by "measures" (i.e., the RTS should not be overly prescriptive in its obligations), ESMA

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[3] Commission Delegated Regulation (EU) 2017/584, arts. 15, 16, 17, O.J. (L87) 350 (2017).

has elected not to follow MiFID precedent by requiring CASPs to establish a dedicated business continuity function within the organisation.

59. Looking beyond the precedent set by MiFID, the MiCA mandate also directly references DORA (Articles 11 and 12) in paragraph 7 of Article 68. The reference to DORA dictates how this MiCA RTS is structured because CASPs are already included in the scope of DORA as a type of 'financial entity'[4] listed in Article 2(1)(f) of DORA. In light of the mandate for draft regulatory technical standards included in Article 15 of DORA, ESMA considers the ICT-specific business continuity measures for CASPs to be already covered by such regulatory technical standards in [Chapter IV of the DORA RTS on the ICT risk management framework][5]. To avoid duplication, ESMA believes this MiCA RTS should avoid introducing any ICT-specific requirements for CASPs and instead cover only general business continuity measures.[6] However, this consultation paper seeks to clarify how CASPs should approach the standard back-up and redundancy requirements found in DORA given their use of permissionless DLT infrastructure[7] in the execution of CASP services, which raises a question of balance between technology neutrality and consumer protection that is addressed later in this section.

60. ESMA acknowledges that best practices for business continuity policies, plans, and procedures in the context of crypto-asset services have yet to be established. This can make it challenging for CASPs to know where to start and what to prioritize when developing their business continuity policies. Some of the challenges ESMA has identified include: (i) the limits of standardisation and interoperability across DLT networks which poses significant "lock-in" risk for CASPs and an absence of back-up options in the event of a disruption, and (ii) unpredictable governance decisions in decentralised arrangements when multiple stakeholders (e.g., validator nodes, miners, retail investors, protocol treasuries) are involved. This often means decisions about, for example, resuming service after a disruption, must be reached by a voting consensus, which CASPs may have no ability to influence unilaterally.

61. To illustrate why this is an important issue, a CASP operating a trading platform for crypto-assets would be required under MiCA to settle client transactions on-chain within 24 hours (see: Article 76(12) of MiCA). However, if the DLT experiences downtime, CASPs would not have any back-up options for settlement (i.e., a transaction denominated in ETH can only be settled on Ethereum). In other words, CASPs will encounter situations in which they must rely on a specific DLT for settlement, but if that DLT experiences a disruption, there are no alternative methods for completing the

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[4] Under DORA, 'financial entities' refers to a wide range of cross-sectoral entities operating in the market for financial services. For an exhaustive list, see Article 2(1) of DORA.
[5] See: Consultation Paper on Draft Regulatory Technical Standards to further harmonise ICT risk management tools, methods, processes and policies as mandated under Articles 15 and 16(3) of Regulation (EU) 2022/2554 (link). *Note: these technical standards are currently still in draft form as of publication of this paper*.
[6] ESMA notes that the business continuity policy of this draft RTS is the overall business continuity policy referred to in Article 11 of DORA. Even if the ICT business continuity policy can be a separate, dedicated document, it should not be aligned with, and form a crucial component of, the broader business continuity policy of the financial entity (in this case, a CASP).
[7] According to the ISO definition, 'permissionless' implies the DLT system does not require authorisation to perform any particular activity; this applies to both the DLT users and administrators. We use this term throughout the consultation paper to refer to so-called 'public blockchains' such as Ethereum. (See https://www.iso.org/obp/ui/#iso:std:iso:22739:ed-1:v1:en)

settlement. Unlike Cloud Service Providers (CSPs) which all offer a similar, interchangeable product, this type of redundancy is not an option for permissionless DLT infrastructures.[8] Recital 84 of MiCA acknowledges this issue: "[I]n the case of an off-chain settlement, the settlement should be initiated on the same business day whereas in the case of an on-chain settlement, the settlement might take longer as it is not controlled by the crypto-asset service provider operating the trading platform."

62. This issue is also evident in crypto-asset custody services. According to Recital 83 of MiCA on custody requirements, CASPs should be held liable for any losses for their clients resulting from an ICT incident such as a "cyber-attack, theft, or malfunction". However, the second subparagraph of Article 75(8) on custody of crypto-assets appears to explicitly relieve CASPs of any liability when those losses are associated with, "incidents not attributable to the crypto-asset service provider includ[ing] any event […occurring] independently of the operations of the crypto-asset service provider, such as a problem inherent in the operation of the distributed ledger that the crypto-asset service provider does not control". ESMA interprets this to mean that CASPs using permissionless DLT infrastructure that they do not control or manage (i.e., no contractual arrangement exists) are exempted from this liability.

63. As it relates to contractual arrangements, Article 73 of MiCA (on outsourcing) elaborates how CASPs should address the risks associated with third-party providers. But there is no legal basis to consider a permissionless DLT used by a CASPs as a third-party provider because no formal contractual relationship (such as a service level agreement) is required to interact with permissionless blockchains. And if the use of permissionless DLT infrastructure does not constitute a third-party provider relationship (in the traditional contractual sense) then it would not fall under scope of the requirements of the MiCA outsourcing article. In this case, permissionless DLTs may be considered a form of "common good"[9] resource whereas a permissioned DLT operated by a commercial enterprise will likely have contracts available for 'white-labelled' blockchain products; in which case it can be considered as a "third-party provider".

64. In MiCA, Article 62(2) on authorisation lists the items CASPs must present in their application. One of those items (j) is the "technical documentation of the ICT systems and security arrangements, and a description thereof in non-technical language". ESMA published the draft RTS for authorisation in the first consultation package and will ensure it is aligned, where necessary, with the mandate in this draft RTS.

65. Like DORA, MiCA calls for a "proportionate approach" whereby certain CASPs under scope should not be subject to "excessive administrative burden". This is acknowledged in Recital 27 of MiCA which notes that many of the issuers operating in the crypto

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[8] Redundancy refers to having backup options or alternative methods available to ensure the smooth functioning of services (e.g., settlement of transactions) in case of a failure or downtime of the primary system.
[9] Permissionless (public) DLTs are non-exclusionary and rivalrous (meaning congestion raises gas prices and hence the ability of others to consume the DLT's services). This is unlike certain types of non-exclusionary, non-rivalrous open-source software (e.g., Linux), whose quality does not diminish the more is it consumed by others (i.e., a public good).

market are small and medium-sized enterprises (SMEs) or start-ups as well as Article 68(8) which says the business continuity requirements should "tak[e] into account the scale, the nature and range of crypto-asset services provided and shall take appropriate measures to address any deficiencies in that respect". There is precedent for risk-based assessments of "scale, nature and complexity" of certain entities under MiFID. In the two relevant MiFID RTS (2017/584 and 589), trading venues and investment firms under scope are required to conduct a 'self-assessment' based on parameters given in their respective annexes. ESMA is considering replicating this approach (with the caveat that the term CASP captures a range of activities) for this RTS.

4.3 Proposal

66.   ESMA proposes following the structure of business continuity management measures discussed in the Assessment section (i.e., the relevant RTS in MiFID II). This means the draft RTS should start with general organisational arrangements to support the governance around the CASP's business continuity function, followed by the specification of the business continuity policy, and finally, how CASPs should implement the policy via the business continuity plan. Other articles include the definitions (which are not found in Level 1) and two miscellaneous articles (Articles 2 and 7) to address principles for the treatment of DLT infrastructures and proportionality.

67.   ESMA introduces two definitions in Article 1 of the RTS. The definition of 'critical and important functions' is borrowed from DORA (a term that does not have any ICT-specific connotations) and allows the RTS to streamline how we refer to a broad range of business and operational functions that should fall under scope of the regulation. The definition of "permissionless distributed ledger technology"—needed to clarify the general principal on proportionality in Article 6—is adapted from the Financial Stability Board (FSB) definition found in a recent consultative document. [10] The term "permissionless" is accepted by the International Organisation for Standardisation (ISO) and should be sufficiently technical for the industry to understand what it refers to in practice (in this case, publicly accessible DLTs such as Ethereum that do not gatekeep access to the validator network).

Q13: Is the definition for permissionless DLT in Article 1 sufficiently precise?

Q14: Throughout the RTS, we refer to 'critical or important functions.' The term is borrowed from DORA and does not just capture ICT-specific systems. Does this approach make sense?

68.   Existing EU sectoral legislation assigns different obligations depending on the type of financial entity under scope. Even under the mostly harmonised approach of DORA, certain financial entities are subjected to additional requirements (e.g., central

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[10] FSB, Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Consultative document, 11 October 2022 (See Annex 1 here: link)

counterparties, central securities depositories, and trading venues). The CASP services included in Article 3(1)(16) of MiCA encompass many of the same services offered in the traditional market. To account for the range of services captured under the term 'CASP', the RTS uses a mostly standardised approach.

4.3.1 Measures for permissionless distributed ledger technology

69. Given the characteristics of the underlying DLT infrastructure identified in the Assessment section, ESMA proposes to add several provisions that would acknowledge the differences between permissionless DLT and permissioned DLTs in the context of business continuity. These additions acknowledge the novel risks posed by permissionless DLTs without losing sight of the fact that, ultimately, CASPs are responsible for deciding how best to manage this type of operational risk and reflecting this in their business continuity arrangements for a 'timely recovery and response' to disruptive incidents.

70. Although it is not in the text of the RTS, ESMA considers that the use of permissionless DLTs by CASPs should not be subject to MiCA outsourcing requirements in Article 73 since CASPs will often have no feasible back-up options for settlement, custody and other services conducted on a permissionless DLT when they suffer a disruptive incident. This would be in line with references in the Level 1 text that identify carve-outs for CASPs offering on-chain services conducted on DLTs that they "do not control".

71. Although the objective of the differentiated approach for permissioned and permissionless DLT is not to favour one type of technology over another, ESMA believes this approach is necessary to avoid subjecting CASPs to requirements that may unintentionally prohibit their use of permissionless DLTs by a failure to comply— an outcome that would be contrary to the spirit of MiCA. However, this differentiation should not come at the expense of consumer protection, nor is it an invitation for CASPs to engage in 'decentralisation arbitrage'.

72. One new obligation for CASPs based on this reasoning is Article 4(2)(d) (and the associated recital 4), which would require CASPs to communicate externally with their clients in the event of a service disruption involving a permissionless DLT. As part of this obligation, CASPs should provide regular communication to their clients about whether their funds are at risk due to the disruption, and how the distributed ledger will be brought back online (e.g., a fork, or a roll-back to a previous timestamp). ESMA believes this information would ensure a more orderly return to service once the incident is resolved and should constitute an important feature of a CASP's business continuity planning. This provision is partly inspired by similar measures established for external communications under Article 11(2)(d) and Article 14 of DORA. ESMA is seeking input on whether stakeholders consider this an appropriate measure in the preparation of CASP business continuity plans.

Q15: Do you consider subparagraph (e) in Article 4(2) on external communications with clients in the event of a disruption involving a permissionless DLT appropriate for the mandate (i.e., does it constitute a measure that would ensure continuity of services)?

73.   Further, as part of their duty in Article 66 of MiCA to act in the best interests of clients, CASPs that intend to conduct their services on permissionless DLTs should make their clients aware of the risks that this entails at the point when their clients first access those services. In the same spirit of disclosure, ESMA would also encourage CASPs to explain to their clients that their liability does not extend to permissionless DLT.

74.   When defining permissionless DLT in the context of liability for business continuity issues, we should also be conscious of the distinction between an issue related to a CASP smart contract vs. operational issues with the underlying DLT. In other words, CASPs should remain liable for any losses related to their own smart contracts, such as hacks or exploits, regardless of whether they are deployed on a permissionless or a permissioned DLT.

75.   It should also be noted that Article 62(2)(j) of MiCA on the application for CASP authorisation requires them to provide "technical documentation" on the "ICT systems" they use in the execution of services. The draft RTS for Article 62 found in the first consultation package[11] included "DLT infrastructure" as one of the ICT systems whose technical documentation CASPs must share with authorising authorities. This means DLT would be broadly considered an "ICT system" used by CASPs elsewhere in the implementing measures. However, this does not capture the further distinction between permissionless and permissioned blockchains. And while adequate for the RTS on authorisation, it is not granular enough for this RTS.

4.3.2 Business continuity management

76.   The four articles specifying the business continuity management requirements in the draft RTS follow the standardised playbook seen in other sectoral regulations discussed in the Assessment section (e.g., MiFID II). These include (i) organisational arrangements, (ii) the business continuity policy (including independent auditing), (iii) business continuity plan, and (iv) periodic review and testing of the business continuity policy.

77.   Article 2 of the draft RTS on organisational arrangements requires CASPs to have dedicated resources for their business continuity arrangements, including personnel capable of discharging the duties allocated to them as laid out in Article 68(5) of MiCA. Included in these organisational arrangements is the role of the CASP's management body, which must endorse and regularly review the business continuity policy. The article further specifies MiCA Level 1 by requiring the management body to review the

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[11] ESMA, Consultation Paper, Technical Standards specifying certain requirements of the Markets in Crypto Assets Regulation (MiCA), 12 July 2023 (link)

business continuity policy on at least an annual basis (specifying "periodically" in Article 68(6) of MiCA). The article also requires CASPs to establish adequate procedures to ensure that updated information on the business continuity policy is transmitted to all relevant internal staff and external stakeholders.

Q16: Should this RTS also specify that CASPs should establish a business continuity management function (to oversee the obligations in the RTS)? In your view, does this fall within the mandate of 'measures' ensuring continuity and regularity?

Q17: Are there other organisational measures to be considered for specific CASP services?

78.   Article 3 of the draft RTS satisfies part of the mandate by requiring CASPs to establish a general business continuity policy. Importantly, the policy must include the ICT business continuity plans and the ICT response and recovery plans pursuant to Articles 11 and 12 of DORA Level 1. To satisfy this mandate, Article 3(2)(d) requires CASPs to align the general business continuity policy with the ICT specific business continuity plans and ICT recovery and response plans under DORA.

79.   Following Article 3 on requirements for the business continuity policy, Article 4 of the draft RTS requires CASPs to establish a general business continuity plan(s) for their in-house critical or important functions as well as important functions that are outsourced via a contractual relationship with a third-party as specified in Article 4(3)[12]. Again, to avoid overlap with DORA, the plan should only address the CASP's critical and important functions that are non-ICT related. As part of the business continuity planning, CASPs are required to identify risk scenarios, establish recovery time and recovery point objectives for their systems, as well as plan for the relocation or back-up of their critical business functions in the event of a disruption. The one provision which represents a departure from the standard playbook for business continuity adapted from MiFID is the aforementioned Article 4(2)(d) on external communications with clients in the event of a disruption involving a permissionless distributed ledger.

80.   Finally, ESMA in Article 5 proposes an obligation for periodic (annual) tests of the CASP's business continuity plans by the responsible function within the organisation. Testing should be on the basis of "realistic scenarios" and the results of the testing would inform any changes to the recovery time and point objectives, which would then be reviewed and approved by the management body of the CASP. Included in paragraph 3 of the article is a requirement for an independent assessor (either internal to the CASP or a third-party) to audit the results of the testing.

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[12] As discussed earlier, for outsourced DLT infrastructure, ESMA only considers permissioned or "private" DLTs to be subject to this provision.

Q18: Do you consider the obligation for CASPs to conduct testing of the business continuity plans in Article 4(4) via an internal audit function appropriate for the mandate?

4.3.3 Proportionality principle

81. In Article 6, ESMA proposes a general proportionality principle which is meant to specify the language found in Article 68(6) and (8) on the "scale, the nature and range of crypto-asset services provided". The principle calls for CASPs to take into consideration the degree of their use of permissionless DLT in the execution of their services for the purposes of their business continuity plans.

82. Paragraph 2 of Article 6 goes further by building on this proportionality principle with a mandatory 'self-assessment' to be completed by the CASP. The self-assessment is a concept once-again borrowed from MiFID and the rationale for including this provision is to ensure that CASPs are taking stock of the risk factors that may interrupt regularity or continuity in the performance of their services which may trigger the business continuity plan (and affect its execution).

83. The criteria of this self-assessment are available in the Annex of the RTS. One criterion borrows the classes used in Annex IV of MiCA which tiers the ten CASP services in Article 3(1)(16) according to their implied prudential risk (based on varying levels of minimum capital requirements). Other criteria include technical aspects involved in the execution of CASP services, such as the use and maintenance of smart contracts and the use of multi-signature wallets as described in point (c)(vii). To further refine the self-assessment criteria in the Annex of the RTS, ESMA is seeking views from the public on what other criteria may be suitable.

Q19: In Art. 68(8), CASPs are required to take into account the scale, nature, and range of crypto asset services in their internal risk assessments. Is there support for this general principle on proportionality in Article 6? Do you support the proposed self-assessment under Article 6(2) and in the Annex of the draft RTS?

5 Offering pre- and post- trade data to the public

5.1 Background

> **Article 76 (16) (a) of MiCA**:
>
> *"ESMA shall develop draft regulatory technical standards to further specify:*
>
> *(a) the manner in which transparency data, including the level of disaggregation of the data to be made available to the public as referred to in paragraphs 1, 9 and 10, is to be presented;*
>
> *[…]*
>
> *ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 30 June 2024.*
>
> *Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph of this paragraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010."*

84. Article 76 of the markets in crypto-assets Regulation[13] (MiCA) sets out the operating conditions of trading platforms for crypto-assets (hereafter also referred generally as trading platforms) operated by crypto-assets service providers (CASPs). In particular, Article 76(1) sets out that trading platforms should lay down, maintain, and implement clear and transparent operating rules for the trading platform they operate.

85. In addition, regarding pre-trade transparency, Article 76(9) requires trading platforms to make public any bid and ask prices and the depth of trading interests at those prices which are advertised through their trading platforms. The CASPs concerned are required to make that information available to the public on a continuous basis during trading hours.

86. Finally, regarding post-trade transparency, Article 76(10) requires trading platforms to make public the price, volume and time of the transactions executed in respect of crypto assets traded on their trading platforms. They are required to make details of all such transactions public as close to real-time as technically possible.

87. Article 76(16)(a) requires ESMA to develop an RTS specifying the manner in which transparency data, including the level of disaggregation of the data to be made

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[13] 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 L150, 9.6.2023, p.40)

available to the public as referred to in paragraphs 1, 9 and 10 of Article 76, is to be presented.

88. This empowerment under Article 76(16)(a) of MiCA includes two different dimensions that should be considered separately. The first dimension relates to transparency data and how this data should be presented, i.e. what details should be published by trading platforms in relation to crypto assets. The transparency data in this context should be split between pre- and post-trade transparency. In addition, it should also include some requirements to ensure the operating rules for trading platforms on crypto-assets are transparent and readily available to the public.

89. The second dimension relates to the level of data disaggregation that trading platforms are required to make available to users.

5.2 Transparency

90. Transparency is often described as an inherent feature of trading platforms for crypto-assets and, more broadly, of the Distributed Ledger Technology (DLT) where, in particular in the case of public distributed ledgers or blockchains, all relevant data and transactions are, once verified, recorded in chained blocks and therefore made available to everyone.

91. The ability for users to access information on executed transactions through public blockchains and to carry out peer review analysis has been one of the main drivers for the development of these markets. As a consequence, transparency is commonly described as a broadly accepted market practice for trading platforms – including for those that operate under a centralised model.

92. More specifically, ESMA understands that generally the business model of trading platforms does not rely on the selling of trading data and many of these trading platforms make their pre- and post-trade information available to the public free of charge through public interfaces that are updated in real time[14].

93. The MiCA framework seems to have taken this approach to transparency into account as it provides for a simpler regime when compared to the one established in MiFIR for financial instruments. Even though both MiCA and MiFIR regimes are built under the same guiding principle - i.e., real time publication of trading information is the norm, MiFIR includes many explicit exemptions to this principle (including pre-trade transparency waivers and post-trade deferrals) which have not been reproduced in MiCA.

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[14] See for instance for Binance (https://www.binance.com/en/trade/BTC_USDT?theme=dark&type=spot), for Kraken (https://trade.kraken.com/markets), for Coinbase (https://data.coinbase.com).

94. From a more operational standpoint, trading platforms for crypto-assets operate trading arrangements that appear to be similar, if not identical, to those of traditional exchanges. This is particularly true for a so-called Centralised Exchange (CEX). CEXs are trading platforms that enable users to buy and sell cryptocurrencies. As the name implies, these trading platforms are operated centrally and function in a similar way to traditional exchanges where the operator offers an environment for buyers and sellers to trade. Transactions on CEXs are generally documented electronically and then validated on the related blockchain at a later point in time. The exchange provider would typically offer the facility for trading crypto-assets for a transaction fee. At the same time, centralised crypto exchanges would also have access to the public keys of users.

95. Regarding the specific trading systems used by these CEXs, ESMA understands that they generally offer facilities that are very similar to the central limit order books (CLOB) offered on traditional exchanges. Trading is therefore organised around one main interface or pool where all trading interests in relation to a crypto-asset are centralised. As on traditional exchanges, the market is "made" by professional actors (i.e. market markers).

96. If these so-called "spot markets" are generally the main trading facility to execute orders, big CEXs in particular offer a broader scope of facilities to match the specific needs of their different types of clients (e.g. retails investors that trade crypto-assets for the first time, experienced retail investors, institutional investors, etc...)[15]. While a detailed case by case assessment of each of these services would be necessary to define their exact legal nature, some seem to resemble the other types of trading systems commonly used by traditional exchanges such as quote-driven or periodic auction systems.

97. Regarding the type of orders, there are also similarities between traditional exchanges and the trading functionalities offered by CEXs. Notably, the majority of trading platforms for crypto-assets offer the possibility for their clients to enter limit orders[16] or stop-loss orders, i.e. orders that can execute only if the prices reach a pre-determined limit.

98. Alongside CEXs, Decentralized Exchanges (DEXs) present a different way to trade crypto-assets. On DEXs, there is no central operator and, as a consequence, no central control over users' assets. Instead, users keep control of their assets by interacting with the distributed ledger (i.e. blockchain) using a self-custody wallet. With DEXs, the blockchain takes the place of the intermediary. DEXs use autonomous code (often referred to as a 'smart contracts'), to execute trades directly on the settlement layer of the blockchain (with differing degrees of decentralisation).

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[15] For instance, Binance offers, aside of is "spot trading" facility, other possibility to execution orders and transactions in crypto-assets such as Binance Convert, Margin, Strategy trading, P2P, Swap farming, Binance OTC.
[16] Some trading platforms refer to "slippage" rather than "price limit".

99.   DEXs may run an order book but also less traditional models such as Automated Market Makers (AMMs). These decentralised models are increasingly becoming important in particular in decentralised finance (DeFi). Under these AMM models, contrary to CLOBs where market makers post bid and offer prices on the order book, the liquidity provision process is decentralised, relying on aggregated pools of liquidity (often comprised of a token pair, e.g., Ethereum (ETH) to USD Coin (USDC)) and on a mathematical formula (e.g., a constant product function) to price assets. The execution price is generally determined based on how many assets an order would consume in the concerned pool of liquidity and the resulting unbalanced quantities of asset between the related pools.

Q20: Do you agree with the description provided for the different types of CEX and DEX listed?

Q21: <u>For trading platforms</u>: Please provide an explanation of (i) the trading systems you offer to your users, (ii) which type of orders can be entered within each of these trading systems and (iii) whether you consider these trading systems to be a CEX or a DEX (please explain why)?

5.2.1 Pre-trade transparency

Assessment

100.   As explained above, both the MiCA and MiFIR regimes are built around the same principle that requires information about trading interests to be made available in real time and on a continuous basis. Article 76(9) of MiCA requires CASPs operating a trading platform to publish pre-trade transparency data. Trading platforms are required to make public any bid and ask prices and the depth of trading interests at those prices which are advertised though their trading platforms. This information needs to be available on a continuous basis during trading hours.

101.   However, MiCA also includes some noticeable differences to MiFIR. Firstly, MiCA does not include additional requirements such as a specific obligation to calibrate the pre-trade requirements for trading platforms for crypto-assets depending on the type of trading systems they operate[17].

102.   More importantly, as noted above, MiCA does not include any exemption for specific types of orders or trading conditions. Hence, under MiCA, any bid and ask prices and the depth of trading interests at those prices, are to be made available regardless, for example, of their size, or how they are formalised. MiCA does not provide for any exemptions to the prescribed real-time pre-trade transparency requirements.

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[17] See for instance Article 3(2) and Article 8(2) of MiFIR for equity and non-equity financial instruments respectively.

Proposal

103. Considering the important similarities, in particular between CEXs and traditional exchanges, it appears appropriate to leverage on the existing MiFIR rules to develop the MiCA transparency framework. Therefore, in line with the requirements for financial instruments under MiFIR, ESMA proposes to use the type of trading system as a starting point for determining the appropriate level of pre-trade transparency which must be made public. In its draft RTS, ESMA therefore proposes to calibrate the transparency requirements taking into consideration the different types of trading systems.

104. To that effect, the draft RTS therefore includes in Table 1 of Annex I the description, and the related pre-trade transparency requirements, for continuous auction order books as well as other types of trading systems which can also be relevant to the trading of crypto-assets, i.e. quote-driven, periodic auction, and hybrid.

105. No specific requirements have been included regarding other types of trading systems (in particular request for quote (RFQ) or voice trading) since they do not appear commonly used for the trading of crypto-assets. Should such system be used, they would nevertheless be subject to pre-trade transparency and fall under the "other trading systems" category defined in the Annex of the RTS.

106. In addition, considering the importance and innovative nature of AMMs particularly in a DEX context, ESMA proposes to include a description and the related pre-trade transparency requirements for these trading facilities in Table 1 of Annex I of the draft RTS.

107. Regarding order books "operated" by a DEX, pre-trade transparency requirements would be similar to those applicable to CLOBs operated by CEXs or traditional exchanges. As such, ESMA does not propose any changes in Table 1 of Annex I of the draft RTS to cater for this model.

108. Finally, regarding DEXs, ESMA acknowledges Recital 22 of MiCA that "*(…) Where crypto-asset services are provided in a fully decentralised manner without any intermediary*" should fall outside the scope of MiCA but also notes that the exact scope of this exemption remains uncertain. ESMA considers that an assessment of each system should be made on a case-by-case basis considering the features of the system. In this context, ESMA considers it useful to clarify how pre-trade transparency should apply to such protocols. This is without prejudice to any possible clarification that can be published in the future regarding the scope of the exemption for fully decentralised systems.

Q22: Do you consider the trading systems described, and the transparency obligations attached to each trading system, in Table 1 of Annex I of the draft RTS appropriate for the trading of crypto-assets? Do you offer a trading system that cannot meet the

transparency requirements under the provisions in this Table? Please provide reasons for your answers.

Q23: Regarding more specifically AMMs, do you agree with the definition included in Table 1 of Annex I of the draft RTS? What specific information other than the mathematical equation used to determine the price and the quantity of the asset in the liquidity pools would be appropriate to be published to allow a market participant to define the price of the assets offered in the liquidity pool?

109.   While the calibration of the information to be provided for the purpose of pre-trade transparency per trading system already improves the pre-trade information disclosed, ESMA considers it necessary to further align the practices for disclosing pre-trade information. To that effect, ESMA proposes to complement Annex I of the draft RTS by inserting a table establishing clearer obligations regarding the specific information which is expected to be published for each order and provide for a harmonised content and format.

110.   Tables 2 and 3 of Annex I of the draft RTS specify the content and format of the information to be provided.

Q24: Do you agree with ESMA's proposals on the description of the pre-trade information to be disclosed (content of pre-trade information) under Table 2 of Annex I of the draft RTS? If not, please explain why. If yes, please clarify whether any elements should be amended, added and/or removed.

Q25: Do you agree with ESMA's proposals to require a specific format to further standardise the pre-trade information to be disclosed (format of pre-trade information)? If not, please explain why and how the pre-trade information can be harmonised. If yes, please clarify whether any elements should be amended.

111.   Finally, as explained above, ESMA understands that trading platforms on crypto-assets offer a variety of order functionalities or types, order book limit or good till cancel orders being the most common, especially in the context of CEXs. ESMA is of the view that orders that meet the conditions defined in the RTS can be offered by trading platforms. However, ESMA reiterates the absence of pre-trade transparency waivers in MiCA and that ESMA cannot create an exemption in the RTS, for example for large orders, as it is outside the scope of the Article 76(16)(a) mandate.

112.   It is interesting to note that under MiFIR, reserve and stop orders are considered "orders held in an order management facility" and are granted a specific waiver that allow them to remain undisclosed until the trigger limit is reached. MiCA does not provide for an explicit provision allowing "orders held in an order management facility pending disclosure" to waive the pre-trade transparency obligation.

113.   Under MiFIR those orders are defined to meet the following conditions:

a) the order is intended to be disclosed to the order book operated by the trading venue and is contingent on objective conditions that are pre-defined by the system's protocol;

b) the order cannot interact with other trading interests prior to disclosure to the order book operated by the trading venue;

c) once disclosed to the order book, the order interacts with other orders in accordance with the rules applicable to orders of that kind at the time of disclosure.

114. On this basis two types or orders are identified: (i) reserve orders and (ii) other orders, e.g., stop loss orders or one-cancels-the-other-orders. Reserve orders consist in dividing a large order into smaller limit orders so as to reduce their market impact and limit the possibility of opportunistic arbitrage. Stop loss orders aim at simplifying and automatising the management of trading positions by capping the profits and losses of the trading strategy. They can therefore be regarded as risk management tools which are also beneficial to retail investors.

115. The objective of requiring trading venues to request a waiver for those types of orders was to better monitor the use of these specific order types under the MiFIR legal framework. Beyond the waiver, MiFIR imposes additional disclosure requirements in relation to these waivers (notably an obligation to notify NCAs and ESMA) to facilitate information sharing and promote a convergent use of these tools. Co-legislators have decided not to include such a notification process under MiCA.

116. As explained above, the objective of allowing trading platforms to offer embedded order management facilities is to provide investors with ready-made tools to facilitate the execution of their orders and strategies, allowing for instance to reduce the price impact of large orders and to automatically frame a trading strategy and protect the investor from unexpected price movements. It is interesting to note that, where a trading venue does not offer these orders as inherent features of their trading systems, market participants would anyhow be able to develop these strategies through their own or a third-party order management facility. However, the use of an external order management facility (i.e. those that are no embedded into the trading system of the trading platform) requires a certain level of resources and expertise and are therefore almost exclusively used by institutional investors.

117. In this context, it therefore appears crucial to allow for trading platforms in crypto-assets to offer these order features to their clients considering in particular the very large proportion of retail investors. Such investors would otherwise not have access to these risk management tools which would put them at a considerable competitive disadvantage with institutional investors who will anyhow be able to use similar features through external order management facilities.

118. Therefore, ESMA proposes to calibrate the pre-trade transparency regime for crypto-assets so that orders which meet the three conditions above, can be offered by trading platforms under the MiCA framework and be considered to meet the transparency obligation by being published, in accordance with the details under Table 1 of Annex I of the draft RTS, only once released into the order book.

Q26: Do you agree with the proposed approach to reserve and stop orders?

5.2.2 Post-trade transparency

Assessment

119. The MiCA regime also sets out post-trade transparency requirements for crypto-asset trading platforms. Article 76(10) requires CASPs operating a trading platform in crypto-assets to make public the price, volume and time of the transactions executed. The publication needs to be made public as close to real time as technically possible. These post-trade transparency requirements under MiCA are similar to those under MiFIR, specifically to Articles 6 and 10.

120. The empowerment under MiCA requires ESMA to set out how the requirements under paragraph 10 of Article 76 are to be presented. Therefore, ESMA proposes to set out in the draft RTS the appropriate data fields that have to be included by crypto asset trading platforms when publishing post-trade information.

121. In addition, ESMA considers it necessary, in order to make the post-trade information useful and comparable, to clarify in the draft RTS the concept of "*as close to real-time as is technically possible*" in the context of crypto assets.

122. Lastly, it should be noted that MiCA does not provide for any deferred publication provisions. Therefore, all transactions, regardless of their size, type of instrument or type of transaction, are to be made available to the public as close to real-time as is technically possible without exceptions.

Proposal

123. ESMA notes that crypto-asset trading platforms already provide for a high level of trade transparency which is generally available for users on a real-time basis without any fees charged.

124. Building on the data that is available to users and considering the objective to further standardise the information available, ESMA proposes requiring crypto-asset trading platforms to report the following information in respect of transactions executed under their rules:

      a)   trading and publication date and time;

      b)   identification of the crypto-asset;

      c)   pricing information;

      d)   quantity;

      e)   venue of execution and publication; and

      f)   transaction identification.

125. Tables 1 and 2 of Annex II of the draft RTS specify the content and the format of the information to be published by crypto-asset trading platforms with respect to transactions executed on their systems.

Q27: Do you agree with the proposed list of post-trade information that trading platforms in crypto assets should make public in accordance with Tables 1, 2 and 3 of Annex II of the draft RTS? Please provide reasons for your answers.

Q28: Is the information requested in Table 2 of Annex II of the draft RTS sufficient to identify the traded contract and to compare the reports to the same / similar contracts.

Q29: Is there any other information, specific to crypto-assets, that should be included in the tables of Annex II of the draft RTS? Please provide reasons for your answers.

Q30: Do you expect any challenges for trading platforms in crypto assets to obtain the data fields required for publication to comply with pre- and post-trade transparency requirements under Annex I and Annex II of the draft RTS?

126. In the context of financial instruments under MiFIR, trading venues are required to publish post-trade information as close to real-time as is technically possible and in any case within one minute after execution, for equity and equity-like instruments, and within five minutes[18] after execution for non-equity instruments.

127. Considering the technical capabilities and the speed of execution within the crypto-assets markets, ESMA considers that post-trade transparency data should be published immediately after execution. ESMA understands that there are various blockchain network speeds in terms of the average time it takes for a block to be included in the relevant blockchain. As an example, within the Ethereum network, average block time takes currently about 12 seconds[19] whilst Bitcoin currently takes about 10 minutes[20]. Nevertheless, ESMA considers that for at least CEX, block times should not be taken into account since the post-trade requirements for crypto-asset platforms apply when the transaction is agreed on the trading platform which does not

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[18] For the first three years of application of Regulation (EU) 600/2014 the time limit was 15 minutes.
[19] See for example Ethereum Average Block Time Chart
[20] See for example Bitcoin Block Time Historical Chart

typically coincide with when it is registered in the blockchain (as it may be the case with DEXs).

128.   ESMA is therefore considering reducing the maximum time limit set for equity instruments in MiFIR (currently one minute). ESMA proposes that trading platforms in crypto-assets make post-trade information available to the public as close to real time as is technically possible and in any case within thirty seconds of the relevant transaction.

Q31: What do you consider to be the maximum possible delay falling under the definition of "as close to real-time as is technically possible" to publish post-trade information in crypto-assets? Please provide reasons for your answer.

5.3 Operating conditions

Assessment

129.   The empowerment under Article 76(16)(a) also requires ESMA to take into consideration paragraph 1 of Article 76. ESMA understands that this relates to how trading platforms for crypto-assets need to provide transparent rules for their platform.

130.   Paragraph 1 of Article 76 requires crypto-asset trading platforms to have, maintain and implement clear and transparent operating rules. In particular, it requires trading platforms to set the approval processes, with clear policies and procedures, and define exclusion categories, before admitting crypto-assets to trading. It further requires crypto-asset trading platforms to have objective and non-discriminatory rules which promotes fair and open access, ensure non-discretionary rules and procedures to ensure fair and orderly trading. Finally, it requires trading platforms to set the conditions for crypto-assets to remain accessible to trading, when they can be suspended and provide for an efficient settlement.

Proposal

131.   ESMA proposes that trading platforms publish the information on the operating rules for the trading platform free of charge and in a manner that is easily accessible, non-discriminatory, prominent, comprehensible, fair, clear and not misleading. Considering the mandate only requires ESMA to specify the manner in which the information is presented, ESMA did not further specify any specific operating rules. In particular, the RTS does not include any further elements that govern the policies that ensure fair and open access to the trading platform.

132.   In addition, the information on operating rules for trading platforms should be presented in a way that is easy to read and use a style that facilitates its understanding.

133. Also, ESMA considers that the operating rules for trading platforms should be published on the crypto-asset service provider's website and should be provided in a single document.

Q32: Do you agree with ESMA's approach on the requirements to be included in the draft RTS in relation to a trading platform's operating conditions? Please provide reasons for your answer.

Q33: Do you consider that ESMA should include in the RTS more specific disclosure rules regarding a trading platform's operating conditions, in particular in relation to co-location and access arrangements?

5.4 Data disaggregation

Assessment

134. In addition to specifying the manner in which transparency data is to be presented, the empowerment under Article 76(16)(a) requires ESMA to also include the level of disaggregation of the data.

135. Under Article 76(11), MiCA requires to make the pre- and post-trade data available on a reasonable commercial basis and accessible on a non-discriminatory basis. MiCA also requires trading platforms to make this data available free of charge after 15 minutes and to remain published for two years. The draft RTS in Annex II specifies the maximum level of disaggregation that should be offered by trading platforms when selling their data.

136. The purpose for requiring unbundling of data is to ensure that market data is easily and readily available to users in a disaggregated format. Such disaggregation aims at allowing investors to customise their data solutions to the furthest possible degree.

137. In addition, offering data in an 'unbundled' fashion reduces costs for market participants when purchasing data since it allows to acquire sets of data that are more closely tailored to their specific needs.

138. ESMA understands that currently trading platforms can disaggregate data into any granularity requested by users. Currently, transparency data seems to be mostly freely available for users down to a specific pair from most trading platforms.

139. Nevertheless, ESMA looked at the characteristics of crypto-assets in order to specify the minimum level of disaggregation by which trading venues should offer data.

Proposal

140. Currently, ESMA understands that crypto-asset trading platforms and data providers already disaggregate data to any level required by users. ESMA also understands that

historical data is generally available. In addition, most crypto-assets trading platforms claim to make their data available to users free of charge. In practice though there seem to be some platforms which appear to sell this data under certain circumstances.

Q34: From your experience, are all crypto-assets trading platforms making their data available free of charge? If not, what specific barriers have you encountered to access the data (e.g. price, level of disaggregation).

141. In order to provide data users with relevant information and allow them to only purchase data that they consume, trading platforms should make pre- and post-trade data published in accordance with Article 76(9) and (10) of MiCA available separately.

142. In addition, ESMA considers that trading platforms should disaggregate data on a crypto-asset basis.

143. Furthermore, when looking for time series, users should also be able to buy only a certain period of time and not the full historical data available. Crypto-asset trading platforms should therefore provide users with the possibility to access historic series on a per week basis.

144. The RTS is meant to specify the maximum level of disaggregation but should not prevent crypto-asset trading platforms to offer, in addition, bundled data as they consider relevant, e.g. longer time series of data (full year) or data packaged based on the nature of the crypto-asset (ARTs, EMTs, utility tokens, etc.) or the currency in which the crypto-assets are traded or the type of trading system.

Q35: Do you agree with the level of disaggregation proposed in the draft RTS? Please provide reasons for your answer.

6   Record keeping obligations for CASPs

6.1   Background

145.   In this section of the Consultation Paper, ESMA is seeking feedback from stakeholders on the draft RTS on: (i) one RTS specifying the records to be kept by crypto assets service providers (CASPs) of their services, activities, orders, and transactions; and (ii) one RTS specifying the content and format of order book data to be maintained by CASPs, as well as identifying possible policy options and challenges.

146.   Given the interlinkages and complementarity between orders and transaction data, which both aim at ensuring orderly and integer markets, this section of the CP focusses on transactions and order data as mandated under both Articles 68(9) and Article 76(15) of MICA. In this regard, ESMA considers that covering questions concerning record keeping of orders and transactions in the same section of the CP, even if belonging to two separate empowerments, would facilitate the collection of feedback on these topics and would provide more clarity to CASPs on the interconnection and complementarity of these obligations.

147.   The proposals regarding the remaining part of the mandate under Article 68(9) of MiCA (i.e., the obligation to keep records of services and activities), which are mainly geared towards the different policy objective of protecting investors.

148.   ESMA identified the details to be kept of orders and transactions being mindful that these are instrumental to NCA supervision of CASP's compliance with MiCA requirements and obligations, including market abuse monitoring. In this latter respect, ESMA is currently assessing, as part of an independent study, whether further data on the transactions executed on-chain would be necessary. In this framework, and on the basis of the replies that ESMA will receive from the consultation, ESMA may find that additional data elements would be needed to ensure the fulfilment of NCAs supervisory duties with respect to ensuring the integrity of the markets. The final version of the RTS might therefore feature additional fields.

6.2   Analysis of empowerments

6.2.1   Article 68(10) (b)

Mandate

> **Article 68(9) and (10) of MiCA**
>
> *"9. Crypto-asset service providers shall arrange for records to be kept of all crypto-asset services, activities, orders, and transactions undertaken by them. Those records shall be sufficient to enable competent authorities **to fulfil their supervisory tasks and to perform***

*enforcement measures, and in particular to ascertain whether crypto-asset service providers have complied with all obligations including those with respect to clients or prospective clients and to **the integrity of the market**.*

The records kept pursuant to the first subparagraph shall be provided to clients upon request and shall be kept for a period of five years and, where requested by the competent authority before five years have elapsed, for a period of up to seven years.

10. ESMA shall develop draft regulatory technical standards to further specify:

(a) the measures ensuring continuity and regularity in the performance of the crypto-asset services referred to in paragraph 7 [mandate covered in Section 4]

(b) the records to be kept of all crypto-asset services, activities, orders and transactions undertaken referred to in paragraph 9.Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph of this paragraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010."

149. Article 68 of MiCA sets forth the organisational requirements for CASPs. These include the obligation to keep records of all crypto-asset services, activities, orders and transactions undertaken by them, and provide such records to competent authorities and clients upon request. ESMA is mandated to further specify what records shall be kept.

Analysis

150. The record keeping requirement set for CASPs by Article 68(9) of MiCA, and the corresponding mandate to ESMA, mirrors an equivalent provision of MiFID II[21]: Article 16(6) of that Directive provides that *"An investment firm shall arrange for records to be kept of all services, activities and transactions undertaken by it which shall be sufficient to enable the competent authority to fulfil its supervisory tasks and to perform the enforcement actions [...]"*.

151. This provision of MiFID II was specified in Articles 72 and following of Commission Delegated Regulation (EU) 2017/565[22], and in Section 2 of Annex IV of that same Delegated Regulation. Considering the similarities between MiCA and MiFID record keeping requirements, and the fact that those two provisions aim at the same objective of enabling competent authorities to fulfil their supervisory tasks with respect to the integrity of the market, ESMA considered it relevant to build upon the vast experience

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gathered under MiFIR/D, and use Commission Delegated Regulation (EU) 2017/565 as baseline for the development of this mandate.

152. At the same time, ESMA is aware that such similarity is limited by the fact that under MiCA there is no requirement to report transactions to competent authorities on a T+1 basis that is equivalent to Article 26 of MiFIR[23]. The MiCA's legal text is less prescriptive than MiFIR on the modalities of access to the regulatory data by NCAs because the periodicity according to which data can be collected/accessed from CASPs is not set while in MiFIR the T+1 reporting obligation implies daily data collection *by default*. However, with respect to the content of the records to be kept, the formats and reporting instructions which are set in the correspondent RTS 22 for transactions[24] and RTS 24[25] for orders still constitute a useful library of data elements definitions, with which financial market participants and competent authorities are by now well familiar. In addition, ESMA has already clarified several implementation and application issues of those RTSs in its Guidelines[26] and Q&As[27].

153. It thus appears appropriate to leverage upon these legislative acts, which are the baseline for the record keeping requirements for investment firms under MiFID II[28] for the purposes of the draft RTS. However, ESMA is aware of the differences between MiFID II financial instruments and MiCA crypto-assets in terms of legal framework, risk level and market practices, and the draft RTS has been prepared accordingly.

154. Many fields of RTS 22 and 24 were consequently adapted, some were deleted because not relevant, and new ones were added. The new data elements to be recorded are discussed in details in Sections 1.3 and 1.5 below. Stakeholders' feedback on the extent to which the existing fields in RTS 22 and 24 are relevant in the context of trading in crypto assets and what further adjustments are needed is particularly welcome.

155. The records to be kept under Article 68(9) of MiCA shall "be sufficient to enable competent authorities to fulfil their supervisory tasks and to perform enforcement measures, and in particular to ascertain whether crypto-asset service providers have complied with all obligations including those with respect to clients or prospective clients and to the integrity of the market". Since consistency and comparability of data is essential for competent authorities to seamlessly perform the analysis across datasets, and to exchange supervisory information with other competent authorities, CASPs should provide records of orders and transactions to competent authorities in a standardised form, both in terms of content and format. To minimise the implementation burden, ESMA proposes to define the format of the records by referring, where

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[23]https://www.esma.europa.eu/publications-and-data/interactive-single-rulebook/mifir/article-26-obligation-report-transactions
[24] Commission Delegated Regulation of 28 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the reporting of transactions to competent authorities
[25] Commission Delegated Regulation (EU) 2017/580 of 24 June 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments
[26] https://www.esma.europa.eu/sites/default/files/library/2016-1452_guidelines_mifid_ii_transaction_reporting.pdf
[27] https://www.esma.europa.eu/sites/default/files/library/esma70-1861941480-56_qas_mifir_data_reporting.pdf
[28] In accordance with Article 72 of Commission Delegated Regulation (EU) 2017/565

possible, to well established international standards, including standards on financial messaging.

Proposal

156. Considering the above analysis, the proposals in this CP attempt to meet the surveillance needs of national competent authorities to have standardised transaction data that is comparable with order data while permitting CASPs to maintain their own internal databases with relevant mapping tables and without any loss of original raw data.

157. To achieve this goal, ESMA proposes to adopt the same approach that was implemented under Article 25 of MiFIR, whereby CASPs will have the flexibility to maintain all the transaction data elements indicated in the draft technical standards in the format they consider most appropriate, provided that some of these elements can be converted into a specified format when competent authorities request information. This approach also ensures a smooth transition from the formats currently being used by the different CASPs to the common format to be used across CASPs for regulatory purposes. Examples of some details that must be convertible into the common format would be the details needed to link orders with executed transactions as indicated in Article 76(15) of MiCA. The draft RTS on record keeping under Article 68(10) b) of MiCA thus specifies both the content of the transaction details to be maintained by CASPs and the standards and formats to be used when providing such data to the competent authorities.

158. In addition, ESMA considered the fact that under MiCA there is no transaction reporting obligation, equivalent to the one set forth by Article 26 of MiFIR. The records under Article 68(9) of MiCA will thus be the main source of information of competent authorities, which will be complemented by the information contained in the white-paper register, to be used as a source of reference data.

159. For these reasons, ESMA is proposing a list of data elements which is more detailed than that included in CDR 2017/565 (see Section 1.3 for more details).

6.2.2 Article 76(15)

Mandate

> ***Article 76 (15) and (16) of MiCA***
>
> *"15. Crypto-asset service providers operating a trading platform shall keep at the disposal of the competent authority, for at least five years, the relevant data relating to all orders in crypto-assets that are advertised through their systems, or give the competent authority access to the order book so that the competent authority is able to monitor the trading activity. That relevant*

data shall contain the characteristics of the order, including those that link an order with the executed transactions that stem from that order.

16. ESMA shall develop draft regulatory technical standards to further specify:

(a) the manner in which transparency data, including the level of disaggregation of the data to be made available to the public as referred to in paragraphs 1, 9 and 10, is to be presented; [mandate covered in Section 5]

(b) the content and format of order book records to be maintained as specified in paragraph 15;"

Analysis

160. Article 76 of MiCA lays down the operational requirements for CASPs operating trading platforms for crypto-assets. Paragraph 16 of that Article sets the obligation to keep records of all orders in crypto-assets that are advertised through their systems and to make such records available to the regulators or provide access to the order book. ESMA is mandated to further specify the content and format in which those order book records shall be kept.

161. With respect to order data to be kept by CASPs operating trading platforms, the empowerment in Article 76(16) expressly mandates ESMA to develop draft RTS to specify both content and format of the "*relevant data relating to all orders in crypto-assets that are advertised through their systems*". It also further defines this dataset as including the "*characteristics of the order, including those that link an order with the executed transactions that stem from that order*".

162. This mandate is similar to the empowerment under Article 25(3) of MiFIR, under which ESMA developed the RTS 24 defining the relevant data constituting "characteristic of the order"[29].

163. With respect to transaction data, MiCA does not foresee any specific requirement for CASPs operating trading platforms but only a general one applicable to all CASPs (see Section 6.2.1. above). However, on top of the general record keeping requirement under Article 68(10)(b), the specific requirements for CASPs operating trading platforms also cover the data elements "*that link an order with the executed transactions that stem from that order*".

Proposal

164. Although RTS 24 on order-book record keeping covers trading activities in MiFID financial instruments while the correspondent RTS under Article 76(16) of MiCA will cover activities in crypto assets that are not financial instruments, CASPs may carry

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[29] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R0580

out orders in a similar manner to Investment Firms. Despite the differences in the scope of instruments covered, ESMA believes that when orders are conducted by a CASP, the minimum set of order characteristics as defined in Article 25 of MiFIR should not differ significantly.

165. Unlike the empowerment under Article 25 of MiFIR, Article 76(16) of MiCA mandates ESMA to define a common format for the order records to be maintained by CASPs. The common format is crucial for NCAs to discharge their market monitoring duties as it ensures that the information to be maintained by CASPs operating exchanges is sufficiently standardised to be compared for the purpose of cross-border surveillance.

166. ESMA consequently proposes to request CASPs operating a trading platform to record data elements that are similar to those recorded by trading venues under Article 25 of MiFIR, and to do so by using a common format.

167. Article 76(15) allows CASPs to give NCAs direct access to their records. Consequently, an additional area that may deserve further standardisation is that of Application Programming Interfaces (APIs). The large number of CASPs (more than 5000) already registered under bespoke national regimes in the EU combined with the large volumes of data related to order records that will need to be made accessible to NCAs under Article 76 of MiCA will lead to difficulties for NCAs to adequately perform their market monitoring duties if the way in which the records are made available has no element of standardisation. While this challenge cannot be addressed with ESMA technical standards on record keeping, as indicated in ESMA study on DLT Pilot described in the paragraph below[30], in the cases where the CASPs grant direct access to the records, the need for standardisation is not limited to the format of order records to be kept but also the methods in which the order-book records are made available to NCAs.

Q36: In the context of large number of CASPs and possible different models of data access, what kind of measures (common messages, common APIs, others) would you consider feasible to ensure effective and efficient access to data?

6.2.3 On-chain specific data elements to be included in both RTSs

Analysis

168. In the context of the DLT Pilot Regulation ("DLTR"), ESMA commissioned an external contractor to conduct a study[31] to understand the specificities of DLT trading. The study focused on three selected DLTs (Corda, Ethereum and Hyperledger Fabric). While ESMA does not endorse any of these DLTs, those were considered as a good starting

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[30]The full reports are available on ESMA website: 1) https://www.esma.europa.eu/document/report-dlt-pilot-regime-study-how-financial-instrument-transactions-are-registered-various   and 2) https://www.esma.europa.eu/document/report-dlt-pilot-regime-study-extraction-transaction-data
[31] REGULATION (EU) 2022/858 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2022 on a pilot regime for market infrastructures based on distributed ledger technology, and amending Regulations (EU) No 600/2014 and (EU) No 909/2014 and Directive 2014/65/EU

point for a preliminary analysis. As indicated in paragraph 148 above, ESMA is currently assessing, by means of an independent study, whether further data on on-chain transactions need to be recorded. In this context, together with the replies that ESMA will receive from consultation, ESMA might add additional data elements to be included in the records.

169. The study provided useful insights on what data elements would be useful for NCAs to monitor market conduct on a DLT MTF and TSS. While keeping in mind the differences between trading in DLT financial instruments under DLTR and in crypto-assets under MiCA, ESMA leveraged on the results relating to the analysis of the Ethereum blockchain of the abovementioned study to identify a number of fields, discussed in this section, as relevant for the purposes of supervising on-chain trading activities under MiCA[32].

170. ESMA additionally considered the experience gathered by competent authorities[33] in monitoring on-chain trading activity under the applicable national legislation.

171. On this basis, the present Section lists the identified data fields that should be included in records of both CASPs and CASPs operating a trading platform.

Proposal

Crypto-asset identifier

172. The monitoring of the trading activity in a given crypto-asset requires competent authorities to be able to uniquely identify such crypto-asset.

173. ISIN was designed to capture characteristics of financial instruments, and therefore does not account for neither crypto-assets that are not financial instruments nor for the technical aspects related to the DLT on which the crypto-asset is stored or traded, which are all features that NCAs should have visibility on.

174. In this regard, the most appropriate and wide-spread existing standard to identify a crypto asset seems to be the Digital Token Identifier (DTI). This latter identifier, which is issued and maintained by the DTI Foundation (DTIF)[34], enables to unambiguously link the crypto-asset with the DLT where the instrument is issued, traded or settled, and to consequently identify the governance model associated with that specific DLT type, thus allowing to capture both technical and financial aspects of a given crypto-asset.

175. An additional benefit of using DTI is that it allows recording the price and the quantity for orders and transactions where a crypto asset is exchanged against another crypto

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[32] See sections 3.2.4 and 3.2.5 of the Study available on ESMA website: https://www.esma.europa.eu/document/report-dlt-pilot-regime-study-how-financial-instrument-transactions-are-registered-various
[33] In particular MFSA's Live Audit Log Guidelines (https://www.mfsa.mt/wp-content/uploads/2021/10/Live-Audit-Log-Guidelines.pdf)
[34] https://dtif.org/

asset: since there is currently no globally agreed currency code standard covering crypto-assets, DTI can be used to record which crypto-asset is used to execute the transaction.

176. In this regard, the use of DTI for reporting the price of transactions denominated in crypto assets can help authorities to determine price discrepancies for a specific instrument when it is traded on different DLTs. Reporting the DTI within the price fields would allow enough reference data to identify the characteristics of the DLT token.

177. As for the use of DTI for quantity currency fields of a transaction, the same reasoning applies. The use of DTI would provide enough data on the DLT token being used and would allow regulators to determine its type and characteristics.

178. For additional background and reasoning about the use of DTI, please refer to Section 7.2.3 "*Data elements to ensure identification and classification of white papers in ESMA register*".

Q37: Do you agree with using the DTI for uniquely identifying the crypto-assets for which the order is placed or the transaction is executed? Do you agree with using DTI for reporting the quantity and price of transactions denominated in crypto-assets?

Technical attributes

179. As mentioned above, the DTIF maintains certain technologically relevant information related to each DTI, which can be accessed and downloaded for free on the DTIF register [35] (see Figure 1 below). ESMA would welcome feedback on whether the recording of additional technical attributes would be useful. A list of technical attributes that may be useful for competent authorities has been included in the Table under Paragraph 185.

Figure 1: Technical attributes maintained by DTIF for Bitcoin

Token Identifier	DTI Type	Short name / Long name	Auxiliary Digital Token Mechanism	Status
4H95JOR2X	Native Digital Token	BTC / Bitcoin	-	Validated
Normative Attributes			**Informative Attributes**	
Technology: Blockchain			Long name: Bitcoin	
Genesis Block Hash Algorithm: Double SHA-256			Short name: BTC; XBT	

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[35] https://dtif.org/registry-search/

Genesis Block Hash: 000000000019d6689c085ae165831e934ff763ae46a2a6c172b3f1b60a8ce26f	Token reference URL:
Genesis Block Hash UTC Timestamp: 2009-01-03T18:15:05	Unit Multiplier: 100,000,0000
	Public distributed Ledger Indicator: True

Fork Attributes *[for each fork, the following information]*
Hash ending:
A reference to the base record the fork record modifies: 4H95JOR2X Fork Block Height: 74638 Fork Block UTC Timestamp: 2010-08-15T23:53:00 Fork Block Hash: Double SHA-256 Consensus Mechanism Change Response: True Digital Token Creation Response: False

Q38: Are there relevant technical attributes describing the characteristics of the crypto-asset or of the DLT on which this is traded, other than those retrievable from the DTIF register? Please detail which ones.

Transaction hash

180. Under RTS 22 and 24, trading venues are requested to assign a unique transaction identification code to each transaction that is executed through their system ("TVTIC"). This transaction identifier is unique at trading venue level only and remains relevant for transactions concluded on a trading platform for crypto assets that are fully executed off-chain.

181. However, for orders and transactions involving crypto-assets that are fully or partially executed on-chain, through a platform or otherwise, this identifier may be replaced by the "transaction hash" (or equivalent unique transaction identifier) that is automatically generated on the DLT. For this type of transaction, the use of the "transaction hash" appears more efficient than TVTIC, because, being readily available, it would relieve trading platforms from the burden of having to generate and maintain an additional identifier.

182. It is not clear however which transaction identifier (between TVTIC and transaction hash) would be better suited for hybrid trading systems, i.e., where the CASP resorts to a combination of on-chain and off-chain solutions.

Q39: Do you agree with using the transaction hash to uniquely identify transactions that are fully or partially executed on-chain in orders and transactions records? Please

clarify in your response if this would be applicable for all types of DLT, and also be relevant in cases where hybrid systems are used.

Gas fees

183. Another field specific for orders and transactions involving crypto-assets are "gas fees". These are fees required for Blockchain transactions to cover the costs for the creation of a new block. Record-keeping of "gas fees" can be necessary for the purpose of identifying the sequencing of orders as well as for other purposes such as the identification of high-frequency traders and market makers or the liquidity of various crypto assets. Their inclusion in the RTS should take into account potential variation between different DLT technologies and account for its relevance or lack thereof depending on the crypto-asset and the CASPs involved.

Q40: Do you agree that a separate field for the recording of "gas fees" should be included for the purpose of identifying the sequencing of orders and events affecting the order?

Other fields specific to transactions executed on-chain

184. ESMA is aware that when executing a transaction in crypto assets on a DLT chain, the execution mechanisms underlying each transaction protocol generate, automatically, certain transaction data, that may be relevant for supervisory purposes.

185. The table below provides a description and a proposal on how those data elements should be recorded:

FIELD	CONTENT TO BE RECORDED	Potential value for regulators (based on the findings of the DLT study referred in Section 6.2.3.)
Transaction hash	Where applicable in the cases of transactions fully executed on-chain, CASPs could record this in alternative to the trading platform for crypto-asset Transaction ID under Table 2, Field 34 and Table 4, Field 3 of Annex II to RTS under Article 68 of MiCA, and Table 2, Field 48 of the Annex to RTS under Article 76 of MiCA.	Identifier enabling the unique pinpointing of a specific transaction occurring on the blockchain.
Wallet addresses	Code uniquely identifying the wallet, belonging to the buyer/seller, to which the crypto-asset is transferred.	Every on-chain transaction is associated with a wallet address. Reporting on the wallet addresses involved in the trading of crypto assets can help identify potential market manipulators or insider traders

Smart Contract Addresses	Code uniquely identifying the smart contract address.	Smart contracts are self-executing programs that can automate transactions. Reporting on the smart contract addresses involved in these transactions can help regulators better understand the issuance and trading of these instruments
Timestamps	Date and time value to identify the exact point in time at which the block was created.	Blocks are timestamped, providing a chronological record of transactions. Searching for an Ethereum transaction on a common block explorer, produces the following results: *Transaction Hash* and other details such as the *Status* of the Ethereum transaction, the *Block* it is included in, and the date and time it was created (Timestamp). Timestamp information can provide a better understanding of the Ethereum transaction. Ethereum transactions always have the same *timestamps* as their respective blocks. Including timestamps in on-chain analytics can help regulators detect suspicious patterns of trading activity or market manipulation.
Quantity/ Current Total Supply	Fields to identify the current floating amount of the asset that was traded.	Common token standards for crypto assets, such as ERC-20 and ERC-721, allow minting and burning mechanisms which may modify the current floating supply of a token. Linked to the current market price, this information can be used to monitor market liquidity and identify potential price manipulation.
Gas fee	Blockchain transactions require the payment of fees, which are requested to cover the costs for the creation of a new block.	Reporting on gas fees can help identify high-frequency traders and market makers, who may process batched transactions in one transaction, resulting in high amounts of gas fees[36] as well as provide insight into the liquidity of various crypto assets.

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[36] Although, it is important to note, that high gas fees could also be associated with complex smart contract interactions.

Gas Limit	This is the maximum amount of "gas" that an on-chain user is willing to pay for the executions of a specific transaction.	Such information could be relevant for supervisors because it is typically correlated with the size of the accompanying on-chain transaction. For example, while a regular Ethereum transaction typically has a gasLimit of 21,000 units, they can be more complex than solely sending funds from one address on the network to another address, and the gasLimit set can be significantly higher. This means, a network participant could set a significantly higher gasLimit for an Ethereum transaction if they expect it to take up large computational resources.
Data size	This field is connected to the above. Ethereum transaction can contain "attachments" in a specific *data* field that affect the "gas" required to process the transaction.	This data can range from simple messages, to files, pictures, or other data representable by bytes. Hence, it is also possible that such data may include relevant or illicit data from a regulator's point of view.
"To" and *"from"* fields	The unique identifiers for buyer and seller are usually generated by the DLT protocol on the basis of the buyer/seller wallet addresses. For transaction fully executed on-chain, this information may be recorded in separate fields, in addition to the parties' identifiers indicated in Fields 6 and 15.	Enables the unique pinpointing the sender/seller or receiver/buyer involved in an on-chain transaction. Such information could be complemented with further KYC-data, if acquired by the DLT market infrastructure during client onboarding.

186. In addition, ESMA considered the on-chain data requirements that are already in place in the jurisdictions where a national regime for digital asset service providers is already in place. The table below is taken from the MFSA Live Audit Log Guidelines[37], and lists some on-chain data elements which were not identified in the above-mentioned study commissioned by ESMA.

Field name	Type	Description	Valid values

Currency	String	Currency symbol	DTI[38]
Type	String	Indication as to whether it is a deposit or withdrawal.	Deposit Withdrawal
TravelRule	String	Presence of Travel rule information attached to the transaction	Yes No NA

187. ESMA intends to include all data elements identified in the two tables above in a separate on-chain data table, annexed to both RTS.

Q41: Do you agree with the inclusion of the above data elements, specific for on-chain transactions, in both RTS?

Q42: Are some of the proposed data elements technology-specific, and not relevant or applicable to other DLTs?

Q43: Do you consider it necessary to add a different timing for the provision of identification codes for orders in the case of CASPs operating a platform which uses only on-chain trading?

Q44: Please suggest additional data elements that may be included to properly account for on-chain trading.

6.2.4 Data elements to be included in the records of all CASPs (Article 68 of MiCA)

Meaning of "transaction", "undertaking a transaction" and "executing a transaction"

188. Pursuant to Article 68(9) of MiCA, the obligation to keep records of *"services, activities, orders and transactions"* applies every time one of those is *"undertaken"* by the CASP.

189. *"Undertaking"* a transaction is an expression that is neither defined in MiCA nor has an equivalent in the terminology used in the MiFIR data reporting technical standards or in other pieces of EU financial legislation, which instead use different terms (i.e., "conclusion" or "execution" of an order or transaction), for which they provide clear definitions.

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[38] See above section on "crypto asset identifier"

190. In order to ensure legal certainty, it thus appears appropriate to clarify the meaning that the terms "transaction", "undertaking a transaction" and "executing a transaction" should have for the sole purposes of this RTS.

191. To this end, ESMA tried to align Article 1 of the RTS on record keeping to Articles 2 and 3 of RTS 22 while keeping the scope of those definitions broader, so to encompass all types of market practices.

Q45: Do you find the meaning of the defined terms clear enough? Should the scope be adjusted to encompass or exclude some market practices? Provide concrete examples.

Q46: Are there other aspects that should be defined, for the purposes of this RTS?

Data elements related to reception and transmission of orders

192. Article 3(1), point 23, of MiCA defines the service of reception and transmission of orders as "the reception from a person of an order to purchase or sell one or more crypto-assets or to subscribe for one or more crypto-assets and the transmission of that order to a third party for execution".

193. In order to ensure that the records of transmitted orders are exhaustive enough to empower NCAs to monitor compliance with MiCA requirements along each step of the transmission chain, the transmitting firm should record a list of critical data elements pertinent to the transmitted order.

194. The need for ensuring proper monitoring of transmitted orders becomes even more compelling when the CASP transmits the order to a third country entity. In this case, since the receiving firm is not subject to MiCA, the transmitting CASP should record all details of that order, which no entity would otherwise record.

195. More specifically, for the case where the CASP transmits an order for execution to a third country trading platform or entity, NCAs would need full visibility on all details that are available to the transmitting CASP, which should thus record the transmitted order.

Q47: Do you anticipate practical issues in the implementation of the proposed approach to reception and transmission of orders?

Data elements related to execution of orders on behalf of clients

196. A similar principle to the one outlined in the section above applies to the execution of orders, regardless of whether the transaction is finally concluded outside the EU or not. In particular, the CASP should record the ID of the buyer/seller according to the different use cases specified in Table 4 of Annex II, Fields 6 and 15.

197. Information on the identity of counterparties involved in cross-border trading activity is particularly relevant to monitor market integrity. This data element would be essential

to detect market abuse practices, such as wash trades to inflate the trading volumes of an exchange or a crypto asset[39].

198. ESMA is mindful that in certain circumstances the CASP may not be able to obtain the natural person ID or the LEI of the counterparty. This may happen (i) when the transaction is executed on a trading platform operating an anonymous orderbook; or (ii) when executing the transaction on a third country trading platform that is not part of the same group.

199. For these cases, Fields 6 and 15 of Table 4 in Annex II thus provide for a waterfall approach that CASPs should follow to record the most relevant among the available identifiers. This is notwithstanding the general rule about identifying counterparties either with an LEI or a natural person identifier, when available.

200. Consequently, where the transaction was executed on a trading platform for crypto-assets operating an anonymous order book, the CASP should record the MIC code of the platform or the LEI of the firm.

201. In case of execution on a third country trading platform operating a non-anonymous order book, or if the transmitting and receiving firm are part of the same group, the CASP should record the LEI or the National ID.

Q48: What transaction information can be retrieved in cases where a CASP execute the order on a third country platform/entity?

Q49: Do you anticipate problems in retrieving information about the buyer/seller to the transaction?

Identification of buyer/sellers

202. In order to perform their surveillance duties, national competent authorities must be able to identity clients in a unique and consistent manner.

203. Concerning clients that are eligible for a Legal Entity Identifier, similar to the requirements for investment firms reporting under MiFIR, ESMA considers that also CASPs should have appropriate arrangements in place in order to collect and verify the LEI of its client before the transaction takes place. In particular, CASPs must ensure that the length and construct of the code are compliant with the ISO 17442 standard, that the code is included in the Global LEI database and that it pertains to the client concerned. As it is the case under MiFIR, a client who is a legal entity or structure that is eligible for an LEI, including an individual acting in a business capacity, a charity or a trust, will need to make arrangements to obtain an LEI code if it wants the CASP to

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[39] See Mikolaj Barczentewicz "Crypto-Asset Market Abuse Under EU MiCA" retrievable at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4375201 and Cong, Lin and Li, Xi and Tang, Ke and Yang, Yang, Crypto Wash Trading (July 1, 2023). Retrievable at: Crypto Wash Trading by Lin William Cong, Xi Li, Ke Tang, Yang Yang :: SSRN

continue to act on its instructions or make a decision to trade on its behalf when MiCA becomes applicable.

204. Concerning clients that are not eligible for a Legal Entity Identifier, ESMA considers that also in this instance the same identification methods as the ones imposed on Investment Firms authorised under MiFID should be applied. In the absence of a single harmonised identifier that can be applied across the EEA in order to uniquely identify natural persons that are not eligible for LEIs, MiFIR prescribes a list of national identifiers, which are dependent on the client's nationality in accordance with a specific methodology for selection and assignment. ESMA considers that the same list should be used under MiCA because firm-specific codes to identify clients/buyer/sellers do not provide for a sufficiently unified and robust identification of natural persons, neither will this ensure the desired uniqueness of natural persons' identification.

Q50: Do you anticipate practical issues in the implementation of the methods for client identification that are used under MiFIR?

Short selling flag

205. ESMA understands that certain short selling techniques that are widespread on trading venues can be used on crypto assets trading platforms as well and give rise to similar market integrity concerns.

206. Those techniques may affect transactions that fall under the scope of MiCA. Where this is the case, CASPs should flag this circumstance in their transaction records, so to enable NCAs to monitor potential excessive exposures.

Q51: Do you anticipate practical issues in the implementation of the short selling flag?

Derivative contracts

207. Most of derivative contracts whose underlying is a crypto-asset should qualify as "financial instruments" under MiFID, and thus be excluded from the scope of application of MiCA.

208. There appears however to be some residual use cases of derivative contracts on crypto assets that may not qualify as financial instruments (e.g., because not settled in cash) which would consequently need to be recorded by CASPs and by CASPs operating a trading platform.

209. As ESMA is still in the process of assessing these marginal cases, the two draft RTS on record keeping do not set out instructions on the recording of derivative contracts. These may be included in the text at a later stage once the relevant criteria for the delineation between financial instruments and crypto assets are defined in the respective ESMA guidelines, following the third consultation package on MiCA.

6.2.5 Data elements to be included in the records of CASPs operating a trading platform

Proposal

210. Unlike the Article 25 of MiFIR empowerment, Article 76(16) of MiCA mandates ESMA to define a common format for the order records to be maintained by CASPs. The common format is crucial for NCAs to discharge their market monitoring duties as it ensures that the information to be maintained by CASPs operating exchanges is sufficiently standardised to be compared for the purpose of cross-border surveillance.

Q52: Do you consider that some of the proposed data elements are not applicable/relevant to trading in crypto-assets?
Q53: Do you consider that additional data elements for CAPS operating a trading platform are needed to allow NCAs to properly discharge their supervisory duties?

211. Based on the information from the study conducted in the context of the DLT Pilot Regulation[40], ESMA has identified some fields from RTS 22 which may still be relevant but present certain particularities when applied to trading in crypto-assets. Among these are practices such as the routing of orders by a trading platform for crypto-assets, which although apparently similar to the same activity performed on trading venues, may present specificities that would not apply to all CASPs operating a platform for crypto-assets in the same manner. The purpose would be to ensure that this field is directed only at the necessary CASPs operating a trading platform for crypto-assets.

212. Additional fields that have been included for record-keeping purposes such as the practice of partially filling orders, when only a part of the total volume is within the range asked for an execution, or fill-or-kill strategies where no possibility for partially filled orders exist seem also to be relevant, but any technical differences need to be determined where their applicability to orders in crypto assets may be unclear. ESMA believes that other fields may be affected as well by the different practices performed when trading in crypto assets and wants to ensure that the table of data elements annexed to the RTS is as complete as possible while acknowledging the relevance of fields between different CASPs as well as to the specificities of trading in crypto-assets.

Q54: Do you believe that a specific definition of routed orders should be provided as it applies to orders that are routed by the trading platform for crypto-assets to other venues? Should this definition include CASPs operating a platform which uses only on-chain trading?

Q55: Do you believe that fill-or kill strategies as referenced in MiFID II apply to trading in platforms for crypto-assets? Do they apply to partially filled orders?

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[40] See Section 6.2.3

Financial messaging standard

213.   ISO 20022 is the financial messaging standard currently being used for data exchange between reporting entities and competent authorities under MiFIR, SFTR, EMIR and other reporting regimes. It is widely spread across the financial sector also in areas outside the remit of ESMA's mandate, for instance for payments.

214.   It seems appropriate to use the same standard for MiCA as well, so to reduce implementation burden for both reporting entities and competent authorities alike.

Q56: Do you agree with using messages based on the ISO 20022 methodology for sharing information with competent authorities?

7 Machine readability of white papers and white papers register

7.1 Standard forms, formats and templates of the white papers

7.1.1 Background

Article 6 (crypto-assets other than asset-referenced tokens or e-money tokens)

[…]

10.   The crypto-asset white paper shall be made available in a machine-readable format.

11.   ESMA, in cooperation with EBA, shall develop draft implementing technical standards to establish standard forms, formats and templates for the purposes of paragraph 10.

[…]

Article 19 (asset-referenced tokens)

[…]

9.   The crypto-asset white paper shall be made available in a machine-readable format.

10.   ESMA, in cooperation with EBA, shall develop draft implementing technical standards to establish standard forms, formats and templates for the purposes of paragraph 9.

[…]

Article 51 (e-money tokens)

[…]

9.   The crypto-asset white paper shall be made available in a machine-readable format.

10.   ESMA, in cooperation with EBA, shall develop draft implementing technical standards to establish standard forms, formats and templates for the purposes of paragraph 9.

[…]

7.1.2 Analysis

215. Articles 6(10), 19(9) and 51(9) of MiCA all feature identical mandates for the three classes of crypto-assets. These empowerments will be therefore encompassed in the same ITS, as there is no merit in differentiating provisions related to machine-readability by asset class, even if the templates provided in Annex will be separated by asset class (see Annex x of this consultation paper).

216. The scope of ESMA's mandate is limited by (i) the granular definition of the items to be included in the white-paper, set in Annexes I to III of MiCA; and (ii) the fact that those forms, formats, and templates should ensure machine-readability of the white-paper.

217. ESMA deems it necessary, in order to ensure understandability and comparability of the information provided in templates, that the ITS include a description or explanation of the information to be reported in the fields listed in the MiCA Annexes and/or provide for an indirect limit to the length of the various sections of the white papers. It should be highlighted that such clarificatory descriptions are not intended to provide for further specification of the field resulting in additional disclosure requirements, which would be beyond ESMA's mandate, but should just describe the information to be disclosed. Furthermore, it should also be noted that comparability of the fields, where free alphanumeric text is expected, will inevitably be lower compared to that of fields were specific and/or structured data points can be defined. ESMA welcomes comments from stakeholders with regards to whether such fields can be further specified through specific detailed data points, which would potentially increase the comparability.

218. With regards to the specific format, the mandates included in Articles 6, 19 and 51 require ESMA to define a format enabling machine readability of white papers.

219. Historically, in the crypto-world, white papers were traditionally promotional documents which provided explanations about crypto-asset products and goals to prospective investors. Under the MiCA Regulation, white papers are regulated information whose content is prescribed by legislation. The white paper is "an information document containing mandatory disclosures" (recital 24). Articles 6, 19 and 51 of MiCA prescribe the content of the crypto-asset white papers, which therefore should correspond to the information specified in Annex I and whose format is further specified in this draft ITS. No additional information should be provided in the MiCA white papers. Such additional information could however be provided as part of marketing communications (see more on the specific requirements for marketing communication in paragraph 11) and could be provided in any format (for example, in PDF).

220. MiCA introduces therefore a significant change compared to market practice prior to its entry into application. In fact, in the past the content of the white papers was not prescribed and as a result different, additional or less information compared to the one now prescribed in MiCA was commonly provided. It is not clear at the moment whether, as of the date of application of the relevant provisions, issuer/CASPs in addition to a MiCA white paper will continue to publish additional information in a different document.

If so, that document can, if it meets the relevant requirements under MiCA, be considered as "marketing communications".

221. It is relevant to note in these regards that Articles 7, 29 and 53 of MiCA contain specific provisions related to "marketing communications, indicating among other things that marketing communication shall be clearly identifiable as such (paragraph a), shall be fair clear and not misleading (paragraph b), shall be consistent with the information in the crypto-asset white paper where one is required pursuant to Article 4 or 5 (paragraph c), shall clearly state that a crypto-asset white paper has been published and indicate the relevant website and contact of the offeror or person seeking admission to trading or the operator of the trading platform (paragraph d). Furthermore, it shall contain a statement that it has not been reviewed or approved by any EU competent authority. This means that marketing communication is an entirely separate document compared to the white paper and no marketing information should be included in the white paper prepared pursuant to Article 6, 19 and 51.

222. As a result of these considerations, ESMA deems it relevant to identify a format which (1) fulfils the legal requirement of MiCA (machine-readability) and (2) fulfils the policy objective of ensuring the protection of investors, most notably retail investors, by ensuring that the document is also human readable, easily usable and accessible.

223. It should be highlighted that, notwithstanding the machine-readability requirements, it will be permissible for CASPs/issuers to also make available to investors a copy of the white paper in other formats (for example PDF) as long as the content of those documents is identical to that of the "official" MiCA white paper in the specified machine-readable format.

Machine-readability

224. The term "machine-readable" is not defined in MiCA itself. However, the Open Data Directive (EU) 2019/1024 and the upcoming Regulation on the establishment of a European Single Access Point (ESAP) define machine readability as follows: *"machine-readable format' means a file format structured so that software applications can easily <u>identify, recognise and extract</u> specific data, including individual statements of fact, and their internal structure.* […]".

225. Machine-readability is different from data-extractability, which is defined in the upcoming ESAP Regulation as follows: 'data extractable format' means any electronic open format as defined in Article 2, point (14), of Directive (EU) 2019/10241 that is widely used or required by law, that allows <u>data extraction by a machine</u>, and that is not only human-readable'.

226. In light of these definitions, PDF as well as html are data extractable formats, but not machine-readable formats, since they do not allow data to be identified and recognised by software applications. Therefore PDF and html are not consistent with the MiCA requirements and were not assessed further as viable formats for the white papers.

227.	Two formats were identified as fulfilling the machine-readability requirement, namely xHTML with Inline XBRL tags (for simplicity, iXBRL) and XML, both of which are "file formats structured so that software applications can easily identify, recognise and extract specific data, including individual statements of fact, and their internal structure" as per the definition included in paragraph 10. Both formats therefore are considered machine-readable as per the existing definitions in L1.

Ensuring the protection of retail investors

228.	The MiCA Regulation explicitly indicates that the purpose of white papers is to inform prospective holders and in particular *retail* holders of the characteristics, functions and risks of the crypto-assets that they intend to purchase. Recital 24 indeed states that the white paper should be an "information document", aimed at ensuring the protection of perspective retail holders in particular.

229.	From a retail investor viewpoint, it is essential to be able to read a white paper as if it was a human readable document (e.g., consuming the information as if it was a PDF or a webpage in html), other than consuming it through software applications. Doing otherwise would create a barrier to the accessibility of the white paper, namely the need to acquire specialised software, which would increase the likelihood that prospective holders are not appropriately informed of the risks associated with their investments.

230.	Although human-readability is not explicitly required, MiCA makes several references to the fact that the crypto-asset white paper should not just be "extrapolated" or "consumed by machines", but that it is relevant for these documents to be also "readable" by humans. For instance, the white paper "*shall be presented in a comprehensible form*" (article 6(2), 19(2) and 51(2)): presenting it as a string of code would hardly meet this requirement. Furthermore, "*the summary shall contain a warning that it should be **read** as an introduction to the crypto-asset white paper*" (Article 6.7(a), Article 19.6(a), Article 51.6(a)) and that it should be "***read** together with the other parts of the crypto-asset white paper*" (Article 15.5(a) and (b), article 26.4(a) and (b) and Article 52.4(a) and (b)). Therefore, there is an expectation that a user may need to "read" through the white paper and not just extrapolating information with software tools, thus supporting the need for human readability other than machine readability.

231.	This is also relevant since the MiCA white papers will contain the sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts (see the RTS on sustainability indicators), for which it would be very important to ensure human readability.

232.	From that perspective, iXBRL is the only machine-readable format identified so far that would enable perspective retail holders to easily access the information contained in the white paper. In fact, iXBRL is at the same time human readable and machine readable and does not need additional software in order to be rendered and be read by humans, since it can be opened in any standard browser. iXBRL is also the only machine-readable format that would ensure complementarity and consistency between

the disclosure of sustainability indicators under MiCA and the disclosure requirements for sustainability information under the Corporate Sustainability Reporting Directive (CSRD)[41], which Recital 7 of MiCA indicates should be a criteria for ESMA in developing its technical standards.

233. XML on the other hand is a text-based format which can only be consumed by humans if rendered by specialised software. Therefore, users would not be able to read through an XML-based white paper without using additional software. It is relevant to note in these regards that there is currently no standardised way to render an XML document. This means that when making available a white paper, each preparer would either only make available the simple XML document (which is not human readable) or make available a custom-made renderer, which might create risks in terms of harmonisation and consumer protection across different entities and different Member States.

234. iXBRL is used since 2021 for the preparation of annual financial reports of companies admitted to trading on regulated market (under the so-called European Single Electronic Format[42] - or ESEF - regime) in the EU. As mentioned, it is also the format mandated for the preparation of sustainability reporting pursuant to the CSRD. XBRL is also widely adopted for regulatory and prudential reporting under the scope of EBA and EIOPA for data submission from national competent authorities[43]. In the US, iXBRL is mandated for financial reports and open-end fund prospectuses and was recently mandated for digital cybersecurity reporting.[44]

Cost considerations on the proposed format

235. It is challenging to estimate the costs of producing a MiCA white paper in iXBRL with precision, given that this type of reporting does not currently exist elsewhere in the proposed form. It is relevant to note however that any cost estimate by ESMA needs to consider as a base scenario the existing Level 1 provisions mandating the preparation of the MiCA white paper in a machine-readable format. Therefore, any feasibility and cost considerations provided by ESMA refer exclusively to the incremental costs of one format (namely iXBRL) compared to a white paper in (another) machine readable format, in a scenario in which ESMA does not specify which specific format should be used. Therefore, for example, the costs that issuers or CASPs will face to source the information required by the MiCA Regulation for the white paper are not included in this estimate.

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[41] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) EUR-Lex - 32022L2464 - EN - EUR-Lex (europa.eu)

[42] Commission Delegated Regulation (EU) 2018/815 of 17 December 2018 supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format (Text with EEA relevance) EUR-Lex - 32019R0815 - EN - EUR-Lex (europa.eu)

[43] See in this regards EBA reporting frameworks | European Banking Authority (europa.eu) and Supervisory reporting - DPM and XBRL (europa.eu)

[44] In the US, open-end *funds* must tag the risk/return summaries in their Form N-1A prospectus filings in Inline *XBRL*

236. It is expected that the cost and effort linked to the preparation of a white paper in the proposed iXBRL format would be very limited. In order to confirm this expectation, ESMA has developed a Proof of Concept (PoC) showcasing how an easily editable template (for example an Excel containing a macro, without need for any additional specialised software) would ensure the preparation of a compliant iXBRL white paper at very limited cost. This PoC is available on ESMA's website at this link: https://www.esma.europa.eu/document/mica-white-papers-poc. At this stage the PoC is made available to respondents uniquely to showcase how simple the process of preparing a MiCA white paper in iXBRL would be[45]. Stakeholders are invited to provide views as to whether this type of implementation support would be desirable and usable for them if iXBRL is mandated as the required format of MiCA white papers. Please note that such implementation support, if provided, would not be mandatory to use.

237. It is therefore relevant to estimate the costs in case the issuer/CASP was to comply with the proposed obligation without any implementation support from ESMA. In that scenario, the cost of preparing a MiCA white paper structured as a standalone iXBRL file with a simple "closed" taxonomy (i.e., a template)[46] is likely to sit between a few hundred and a few thousand euros for the first filing, excluding training costs on iXBRL for employees and/ or support to the software providing the tagging services would need to be added. It is expected that subsequent amendments of white papers or issuance of new white papers would be cheaper since the list of fields to be reported are not expected to change – only the content of the reported fields would change.

238. In order to come to this estimate, ESMA has leveraged on the estimated costs for preparing reports in iXBRL assessed in the course of the already-mentioned ESEF framework, adjusted to account for the specificities of the MiCA requirements for white papers, which are much simpler than those for ESEF annual financial reports.

239. In a market research carried out in 2016, the cost for the outsourced production of an annual financial statement in XBRL format (five tables of primary financial statements and 34 notes, around 50 pages in total) was estimated to start at 400 EUR and run up to 33,000 EUR, with an average cost of 8,184 EUR and a median cost of 4,316 EUR.[47] Subsequent outsourced filings were estimated to range from 340 EUR to 6,600 EUR, with an average of around 2,400 EUR and a median of 1,750 EUR. In-house production of the same report was estimated to cost for first filings between 2,700 EUR and over 40,000 EUR with an average of 13,000 EUR and a median of 11,500 EUR. Subsequent in-house filings involved a cost between 100 and 1,000 EUR with average and median

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[45] Please note that the PoC only include an extract of the future MiCA white paper and it should not be used as a basis for the preparation of a compliant MiCA white paper

[46] Please note that the proposed requirements included in the draft ITS, would not require contrarily to ESEF, extensions, anchoring nor other complex tagging/filing rules

[47]Feedback Statement on the Consultation Paper on the Regulatory Technical Standard on the European Single Electronic Format (ESEF), MergedFile (europa.eu) page 95

of around 500 EUR. [48] These estimates do not consider costs such as the training of employees on iXBRL technology.

240. However, ESEF has much more complex requirements than those foreseen for the MiCA white papers, namely issuer-specific extensions, anchoring requirement for those extensions, choice of tags on the basis of the accounting meaning of the disclosure being tagged etc. Furthermore, the preparation of annual financial statements typically relies on complex data sourcing systems. In order to streamline reporting and minimise manual errors, it is not uncommon that preparers of financial statements choose to integrate iXBRL solutions directly into their accounting ledgers and therefore that the first-time preparation of iXBRL reports provides them with an opportunity to rekindle their entire reporting system. This explains the highest cost ranges estimated for the first-time preparation of an iXBRL report. The option to integrate iXBRL into the data sourcing system however is most likely not relevant for MiCA white paper preparers.

241. Therefore, it is expected that the costs of preparing a white paper in iXBRL format would be at the lower end of the spectrum of the costs estimated for XBRL financial reports and no higher than the median cost estimates.

242. These cost estimates also do not include the costs linked to the inclusion of graphs, tables or other elements of advanced graphic design other than a simple logo. This is because the type of information required to be disclosed under MiCA is largely textual/descriptive information (please see the Annex to the draft ITS on white paper format, standard and templates and the draft RTS on content, methodologies and presentation of information in respect of the sustainability indicators in relation to climate and other environment-related adverse impacts under the MICA). Therefore, it is deemed that the vast majority of white papers will not include any elements of advanced graphic design.

243. It should be noted however that the inclusion of graphs and tables is permissible under MiCA[49] and might be relevant for a few fields. One such field is for example the "financial condition of the issuer over the past three years". In order to provide this disclosure, it might be useful that a white paper includes a table or a graph with some key metrics. The iXBRL format allows for the preparation of highly stylised documents (see for example the annual financial report prepared in iXBRL format by the Global LEI Foundation[50]) but this would inevitably imply some additional costs and the use of specialised software solutions. Such costs are not estimated in this section because graphs and tables are not mandatory to prepare a compliant white paper in iXBRL and they are unlikely to be useful for the vast majority of disclosures required. This is also

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[48] Ibid, page 96
[49] Please note that tables are allowed as long as they are not embedded in the file as images and data is therefore readable by machines, whilst graphs are allowed as long as they do not replace the disclosure obligation but merely allow data to be represented it in an additional way.
[50] gleif.org/assets/components/xbrl-viewer/gleif-annual-report-2021/ixbrl-report-2021-viewer.html

because, as mentioned already, information other than that explicitly required by MiCA is not allowed in the white paper.

7.1.3 Proposal

244.   On the basis of the analysis carried out and previous experience, ESMA considers that iXBRL is the machine-readable format that would best meet the legal requirements and policy objectives set out in MiCA and ensure the highest level of consistency with other disclosure requirements for sustainability information. However, considering the new features of markets in crypto-assets, ESMA is assessing the possibility of launching an independent study to evaluate the level of appropriateness of this format (including from a cost perspective for both issuers/CASPs and NCAs) as well as other available alternatives for the purpose of ensuring machine readability and human readability of the white papers under MiCA.

Q57: Do you agree with the criteria proposed for identifying a relevant machine-readable format for the MiCA white paper and consequently with the proposal to mandate iXBRL as the machine-readable format for MiCA white papers, subject to the outcome of the study referred to in paragraph 239?

Q58: If yes, do you agree that the white paper should be required to be a stand-alone document with a closed taxonomy (i.e., without extensions nor complex filing rules)?

Q59: If not, please elaborate your answer and propose alternative solutions that would best meet the criteria identified in section 7.3.

Q60: Are you currently preparing white paper documents in a different machine-readable format? If yes, which one?

Q61: How different is the white paper mandated by MiCA and further specified in this Consultation Paper from any white paper which you have drawn up or analysed prior to MiCA? Do you think that any additional information that used to be included in white papers prior to MiCA but that is no longer allowed under the relevant provisions of MiCA for the white paper will continue to be made available to investors as marketing communication?

Q62: Do you agree with ESMA's estimate of the cost of preparing a white paper in iXBRL format? If not, where would you put the estimate of a preparing a white paper in iXBRL format (not considering costs of information sourcing which should be considered as base scenario)?

Q63: Do you agree with the proposed template for presenting the information as indicated in the Annex to this CP? We welcome your comments on the proposed fields and values/descriptions to be included in the fields - please provide specific references to the fields which you are commenting in your response and pay specific attention to the areas where additional explanatory description of the information is provided.

Q64: Are there additional data elements in the table of fields that would benefit from further explanatory descriptions to ensure that the information provided by a given issuer/offeror is understandable and comparable to the information provided by other issuer/offeror of the same type of crypto-asset? If yes, please elaborate and provide suggestions.

Q65: Would you deem it useful for ESMA to provide an editable template to support preparers with the compliance of the format requirements proposed in the draft ITSs?

7.2 Data necessary for the classification of white papers

7.2.1 Background

> **Article 109(8)**
>
> *8. ESMA shall develop draft regulatory technical standards to further specify the data necessary for the classification, by type of crypto-asset, of crypto-asset white papers, including the legal entity identifiers of the issuer and crypto-asset white paper, in the register and specify the practical arrangements to ensure that such data is machine-readable.*

7.2.2 Analysis

245. The ESMA register under Article 109 of MiCA provides the opportunity for ESMA to deliver on two objectives outlined in the ESMA strategy 2023-2028 by enhancing investor protection and the effective use of data by supervisors.

246. First, the register should "empower retail investors to make well-informed investment decisions" on crypto-assets, which are innovative products potentially exposing them to new risks. The register can achieve that by providing one single access point to standardised, reliable, and comparable information across crypto-assets.

247. Second, the ESMA register should aim to "offer enhanced information to supervisors allowing them to make evidence-based decisions and act in full knowledge of the information available in the market". The register can achieve that by becoming the sole EU-level source of standardised information on crypto-asset white papers and their classification. This use of the register is also confirmed in MiCA Article 97(2) and (4), which refers to the register as a tool to "promote convergence on the classification of crypto-assets".

248. Pursuant to Article 109(8), ESMA should specify in an RTS the metadata necessary for the classification of the white papers into the register, and the practical arrangements to ensure that such data is machine readable. The empowerment is to a certain extent

similar to the one given to ESMA under Article 21(13)[51] of the Prospectus Regulation (see Commission Delegated Regulation (EU) 2019/979).

249. Under MiCA the classification of a given instrument as crypto-asset or as financial instrument, as well as the categorisation between different types of crypto-assets, has significant implications on the applicable requirements. The Register will provide the only standardised set of data elements consolidated at EU level that NCAs can use to verify the classification of the different types of crypto-assets. This will contribute to achieving a convergent approach to the classification of crypto-assets as NCAs can base their assessments on a consistent, comparable dataset.

7.2.3 Proposal

Data elements to ensure searchability of the white papers in ESMA register

250. Based on the above analysis, ESMA intends to require certain metadata in order to be able to make white papers easily searchable through its database most notably on the basis of their classification into the three types of crypto-assets foreseen by MiCA (asset-referenced token, e-money tokens and other).

251. Considering that the MiCA white papers will need to be made available on the European Single Access Point (ESAP) in the future (phase 3 of the ESAP), it is relevant that the data necessary for classification in the white paper register and the mandatory metadata expected under the ESAP are consistent (see article 7 of the upcoming ESAP Regulation). Such metadata should be at least the following[52]:

   a) the names of the entity to which the information refers and of the natural or legal person to which the information relates;

   b) the legal entity identifier of the entity that submitted the information and of the legal person to which the information relates, where applicable;

   c) the type of information;

   d) the date and time in which the information was submitted to the collection body by the entity;

   e) the date or period to which the information relates;

   f) the country of the registered office of the person to which the information relates;

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[51] According to which ESMA shall "[…] specify the data necessary for the classification of prospectuses referred to in paragraph 5 and the practical arrangements to ensure that such data, including the ISINs of the securities and the LEIs of the issuers, offerors and guarantors, is machine readable".
[52] On the basis of the metadata set in the ESAP L1.

g) the industry sector(s) of the economic activities of the person to which the information relates.

h) the collection body responsible for the collection of the information submitted[53];

i) the original language of the submitted information.

252. ESAP in addition requires entities to be classified on the basis of size. As of today, however, all crypto-issuers would fall under the category of small and medium size entities on the basis of the categories and thresholds defined by the Accounting Directive (EU Directive 2013/34/EU) or the Prospectus Regulation (REGULATION (EU) 2017/1129 D) - which were identified as the most relevant level 1 legislations to define the size of the entities under the scope of MiCA. It is therefore recommended that "size" is not included as an additional metadata item since all entities should belong to one single size category.

253. It is relevant to note in these regards that the Joint Committee will be defining its approach with regards to the characteristics of the metadata pursuant to the upcoming ESAP Regulation in the coming months. Therefore, the proposed approach for the MiCA is subject to evolve as a result of additional reflection and market feedback received also in the context of ESAP.

Data elements to ensure identification and classification of white papers in ESMA register

254. The metadata to be defined should include a pre-defined set of characteristics of the instrument as the generic reference to "description of the characteristics" in Annex I (Part D and F); Annex II (Part B) and Annex III (Part B) would not be sufficient to ensure that the white papers notified to the NCAs can be compared and properly assessed by investors and NCAs. In this way, the descriptive information about the main features and characteristics of the crypto-assets will be standardised and comparable and could be used by the national competent authority to assess whether the notified instrument falls under the scope of MiCA, and whether the issuer/offerors classified them under the correct crypto-asset category. This approach would also ensure that investors can properly compare different crypto-asset white papers and NCA can perform their assessment on the basis of harmonised information.

255. Accordingly, ESMA proposes the following. A valid ISO 24165 Fungible Functional Group Digital Token identifier (FFG) and the more granular DTIs pertaining to the crypto-asset(s) referred in the white paper should be provided as part of the metadata. Such granular DTI identifier will enable regulators to unambiguously link the crypto-asset white paper with the relevant blockchain where the instrument is issued/traded/settled. In addition, it will enable regulators to identify those crypto-assets

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[53] Please note that for MiCA white papers the collection body is expected to be ESMA

to which an ISIN were already assigned as the ISIN code is recorded in the reference data pertaining to the DTI.

256.   In fact, as illustrated in the image below, Native coins and smart contracts can exist on multiple chains through:

   a)   Multiple owner issuance (e.g., TetherUSD)

   b)   Cryptographically Wrapped assets (e.g., Wrapped BTC on Ethereum)

   c)   Liquidity Pools (e.g., Uniswap)

   d)   Pegged assets (e.g., Binance USD on Ethereum)

257.   The DTI is assigned at the level of the blockchain while Functionally Fungible Group DTI bring these together based on criteria set out by the DTI Foundation (DTIF), e.g., Owner guaranteed, Cryptographical, White Paper. As there will be many DTIs for one individual white paper, ESMA considers that both the DTI and the FGG should be disclosed in the MiCA white paper.
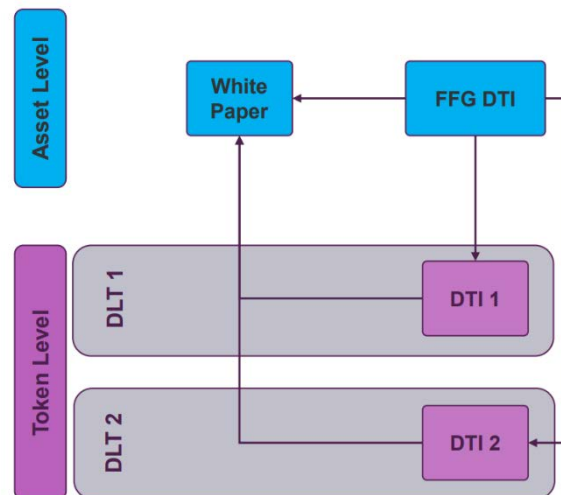
Illustration of FFGDIT, prepared by the DIT Foundation

258.   With respect to the process for definition of the above criteria as well as the governance set up for the ISO 24165 DTI standard, it should be noted that this standard was produced by ISO TC68 SC8 WG3 and it adheres to the governance envisaged within ISO. Accordingly, future changes or enhancements to the standards are consulted with market stakeholders[54] and the standard is maintained in accordance with the non-profit and open data principles[55].

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[54] Product Advisory Committee > DTIF
[55] Home Page > DTIF

Legal entity identifiers

259. Issuers, offerors and/or persons seeking admission to trading of crypto-assets that are eligible for a Legal Entity Identifier are identified with valid legal entity identifiers (LEIs). As it is the case for investment firms and clients under MiFIR, the entity that submitted the information on the white paper to the competent authority is responsible to ensure that its own LEI is duly renewed according to the terms of any of the accredited Local Operating Units[56] of the Global Entity Identifier systems. However, the notifying entities are not responsible to ensure the duly renewal of the LEI reported to identify the legal person to which the information relates, e.g., the issuer of the white paper in the cases where the notifying entity is not the issuer.

260. Entities eligible for an LEI also include entities without legal personality such as partnerships, associations, and individuals acting in a business capacity. The LEI ROC assessed all cases in various jurisdiction where entities without legal personality might still be eligible for LEIs and published international guidance[57] to clarify that all such entities are indeed eligible and how LEI should be assigned in these cases.

261. Accordingly, the LEI ISO standard also refers to such international guidance and explicitly states that entities that do not have "legal personality" are <u>eligible</u> for LEIs, *i.e. any legal entities, which include, but are not limited to, unique parties that are legally or financially responsible for the performance of financial transactions or have the legal right in their jurisdiction to enter independently into legal contracts, regardless of whether they are incorporated or constituted in some other way (e.g. trust, partnership, contractual). It includes governmental organizations, supranationals and <u>individuals when acting in a business capacity</u>, but excludes natural persons.* In 2020, the standard was revised to further clarify examples of <u>LEI eligible entities</u>. However, a branch should be identified with the LEI of its head office, even if it may be considered eligible for a LEI in some cases.[58]

262. Considering that natural persons not acting in a business capacity do not seem to be in a position to act as issuer, an offeror or a person seeking admission to trading of crypto-assets, ESMA could not identify any case where those entities would not be eligible for an LEI. Therefore, ESMA considers that issuers, offerors or persons seeking admission to trading of crypto-assets should obtain an LEI even in the cases where they do not already have one and maintain its own LEI current for the purpose of fulfilling the obligations under MiCA.

Identification of trading platforms

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[56] <u>Get an LEI: Find LEI Issuing Organizations - LEI – GLEIF</u>
[57] The LEI ROC statement on eligibility for individuals acting in a business capacity should be consulted for further details (<u>http://www.leiroc.org/publications/gls/lou_20150930-1.pdf</u>).
[58] According to the LEI ROC statement of 11 July 2016, certain branches might be considered as eligible for a LEI subject to the conditions set out in the statement. The LEI ROC statement should be consulted for further details (<u>http://www.leiroc.org/publications/gls/roc_20160711-1.pdf</u>).

263. ISO 10383 MIC codes are required for the identification of trading venues under EMIR, SFTR and MiFIR transaction reporting. This internationally recognised ISO standard is used also for third country venues trading traditional financial instruments. Upon having verified with the relevant ISO 10383 registration authority, ESMA received confirmation that crypto currency exchanges would equally be eligible for a MIC.

264. As a given CASP could in principle operate more than one trading platform, to ensure accurate identification and grouping of trading platforms operated by the same legal entity, ESMA considers that it would be appropriate to require both the LEI of the operator of the platform and the MIC pertaining to the given platform because this latter code allows for the identification of trading platforms at a more granular level than the LEIs.

Q66: Are there any other data elements that you would consider relevant to ensure that investors can properly compare different crypto-asset white papers and NCA can perform their classifications on the basis of harmonised information?

Q67: Do you agree with ESMA's conclusion that an issuer, an offeror or a person seeking admission to trading of crypto-assets should always be eligible for an LEI? If not, please provide a description of the specific cases

Q68: Do you agree with the proposed metadata elements, also considering the mandatory metadata expected to be mandated in the context of ESAP?

Q69. Do you have any feedback in particular with regards to the metadata on the "industry sector of the economic activities" and its relevance for the ESAP search function?

8 Technical means for appropriate public disclosure of inside information

8.1 Background

> **Article 88 (4) of MiCA:**
>
> *"In order to ensure uniform conditions of application of this Article, ESMA shall develop draft implementing technical standards to determine the technical means for*
>
> *(a) appropriate public disclosure of inside information as referred to in paragraph 1; and*
>
> *(b) delaying the public disclosure of inside information as referred to in paragraphs 2 and 3."*

265. Title VI of MiCA establishes rules to deter market abuse with respect to trading of crypto assets. As part of these rules, MiCA prohibits insider dealing, unlawful disclosure of inside information, and market manipulation and includes an obligation to publicly disclose inside information.

266. One of the pillars of MiCA's market integrity provisions is the definition of inside information, which is defined in Article 87 of MiCA as: "(…) information of a precise nature which has not been made public, relating, directly or indirectly, to one or more issuers, offerors or persons seeking admission to trading, or to one or more crypto-assets, and which, if made public, would have a significant effect on the prices of the relevant or related crypto assets".

267. Article 88(1) of MiCA requires issuers, offerors or persons seeking admission to trading to inform the public as soon as possible of inside information that directly concerns them, in a manner that enables fast access as well as complete, correct and timely assessment of the information by the public. The same provision requires the relevant parties to post and maintain on their website, for a period of at least five years, all inside information that they are required to publicly disclose.

268. Article 88(2) of MiCA establishes that issuers, offerors or persons seeking admission to trading can delay the disclosure of inside information where immediate disclosure would be likely to prejudice a legitimate interest of the relevant party, and if the delay of the disclosure is not likely to mislead the public and the confidentiality of the information is ensured.

269. In cases where NCAs suspect issuers, offerors or persons seeking admission to trading of not properly disclosing inside information, NCAs may seek remediation through the supervisory and investigative powers listed in Article 94. In addition to these general supervisory powers for NCAs, MiCA in Article 111 (5) also lists specific sanctions for breaches of Article 88. These sanctions include maximum administrative fines of EUR 1m for natural persons and EUR 2.5m for legal persons.

270 With respect to the disclosure of inside information, Article 88(4) of MiCA mandates ESMA to develop a draft ITS to determine the technical means for (i) appropriate public disclosure of inside information and (ii) delaying the public disclosure of inside information.

8.2 Assessment

271. ESMA understands that the aim of the draft ITS is to ensure a uniform application of the obligation to disclose inside information to reduce the risk of market abuse and ensure confidence in markets in crypto-assets.

272. Hence, the draft ITS should specify (i) the requirements related to the technical means for the disclosure of inside information as to guarantee equal access by investors to inside information at Union level, and (ii) the requirements related to the technical means for delaying the disclosure of inside information, to ensure that the relevant parties can fulfil their obligations when notifying the competent authorities.

273. To harmonise the draft ITS with other relevant regulations, ESMA has undertaken a comparison between the MiCA provisions on disclosure of inside information and analogous requirements in the Market Abuse Regulation (MAR), already in application at Union level. ESMA has also considered the requirements specified in the MAR ITS on the technical means for appropriate public disclosure of inside information and for delaying the public disclosure of inside information[59] (hereinafter MAR ITS).

274. The definitions of inside information provided in both Article (87)(1)(a) of MiCA and Article 7(1)(a) of MAR are nearly identical (the only difference being the instruments in scope, i.e., financial instruments vs. crypto-assets). The duty of relevant parties to inform the public about inside information is also analogous in nature in both Article 17(1) of MAR and Article 88(1) of MiCA. Both articles share the wording on how relevant parties should publish inside information: (i) in a manner that "enables fast access as well as complete, correct and timely assessment of the information by the public"; and (ii) they "shall post and maintain on its website for a period of at least five years, all inside information [they are] required to disclose publicly".

275. Furthermore, MiCA and MAR have comparable requirements regarding the delayed disclosure of inside information. Article 88(2) of MiCA and Article 17(4) of MAR specify that delayed disclosure may occur if all of the following conditions are met: (i) an immediate disclosure is likely to prejudice the legitimate interests of the parties, (ii) the delay of disclosure is not likely to mislead the public and (iii) the relevant parties are able to ensure the confidentiality of that information.

276. Additionally, both legal texts mandate the relevant parties to inform the competent authority of the delayed disclosure (immediately after the information is eventually

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[59] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1055&rid=1

disclosed or alternatively, upon request, if required by the Member State in question) and to clarify how compliance with the mandated conditions has been met.

277. Although MiCA does not address delayed disclosures in the case of a 'protracted process' (as is the case in Article 17(4) of MAR), Article 87 of MiCA does bring protracted processes and their intermediate steps within the scope of 'inside information'. Therefore, ESMA concludes that under MiCA the same conditions applicable to the delay of disclosure of inside information would apply in cases of a protracted process.

278. Rumours are not addressed in the same way in the two regulations. In case of delayed disclosure, Article 17(7) of MAR explicitly requires issuers to immediately disclose the inside information whenever the confidentiality of that inside information is no longer ensured. While under MiCA confidentiality remains a condition for the relevant parties to delay the disclosure, it is worth noting that the Level 1 text does not include a specific paragraph on breach of confidentiality or rumours.

279. However, ESMA's reading of the provision for delayed disclosure under MiCA remains that a breach of confidentiality would require the relevant party to proceed with the disclosure of inside information to the public as soon as possible. As delayed disclosure is an exception to the general obligation to ensure transparency, the delay is possible only when the relevant conditions are met throughout the delayed disclosure process. When one of these conditions - in this case confidentiality - is no longer met, the exemption is no longer applicable and the general obligation to disclose applies. Consequently, any case of breach of confidentiality, including the occurrence of rumour which explicitly relates to inside information under delay, would require immediate disclosure from the relevant party.

280. In addition, the MiCA text diverges from MAR by extending the scope of parties subject to the disclosure obligation to include "offerors and persons seeking admission to trading" (in addition to issuers). As Article 88(1) of MiCA provides for all the three categories of persons to disclose information that "directly concerns them", ESMA is of the view that the provision requires each relevant party to disclose only information about facts regarding them directly. Any different reading foreseeing also the disclosure of information regarding the other relevant parties would result in potentially multiple disclosures by different sources on to the same fact, with messages potentially not fully aligned, to the detriment of publications clarity.

281. Recital 95 of MiCA calls for the relevant provisions of MAR to be applied proportionally to crypto-asset service providers (CASPs)[60] , as they are often SMEs. In this respect ESMA considers that the rules on disclosure of inside information contained in the MAR ITS would not pose an excessive burden on the relevant parties in the crypto-asset

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[60] See point 15 of Article 3(1) of MiCA.

market and can therefore be transposed in the correspondent MiCA ITS in relation to the crypto ecosystem.

8.3 Proposal

282. ESMA has developed the draft ITS considering the similarities between the MAR and MiCA legal texts regarding inside information, its disclosure and the cases for delayed disclosure. Furthermore, ESMA sees merit in aligning the regime for disclosure of inside information under MAR and MiCA to leverage on the experience developed under MAR and streamline the regulatory framework on inside information disclosure. Hence, the MiCA draft ITS has been largely based on the MAR ITS, with the addition and adaptation of some provisions targeting features which are specific to the crypto environment.

Disclosure of inside information

283. With respect to the disclosure of inside information, ESMA notes that Article 88 of MiCA requires that the inside information to be disclosed by issuers, offerors and persons seeking admission to trading should directly relate to the concerned person and that such information should be published in a manner that ensures fast access by the public.

284. In addition, ESMA notes that the first part of Article 88(1) requires to "inform the public as soon as possible of inside information" (i.e., active dissemination), while the last sentence of the same paragraph provides for inside information to be posted and maintained on the website of the relevant party (i.e., publication on the website).

285. ESMA considers that publishing information simply by making it available on the website and leaving to the public the duty to retrieve it would not be sufficient to ensure fast access by investors. Therefore, ESMA concludes that active dissemination of inside information and its publication on the website are two separate obligations, meant to achieve different objectives.

286. On the one hand, active dissemination ensures a wider distribution of the information through the media that are used by the public to retrieve information while, on the other hand, the publication on the website represents a reliable source against which all the other media publications can be checked. Furthermore, publication on the website of a written statement would enable media to pick up spontaneously the inside information and further spread it, in addition to the active dissemination made by the relevant party. As a result, the draft ITS distinguishes between (i) disclosure of the inside information on the website of the relevant party (Article 2 of the ITS) and (ii) active dissemination to the public (Article 3 of the ITS).

FIGURE 2: OBLIGATIONS FOR RELEVANT PARTIES TO DISCLOSE INSIDE INFORMATION
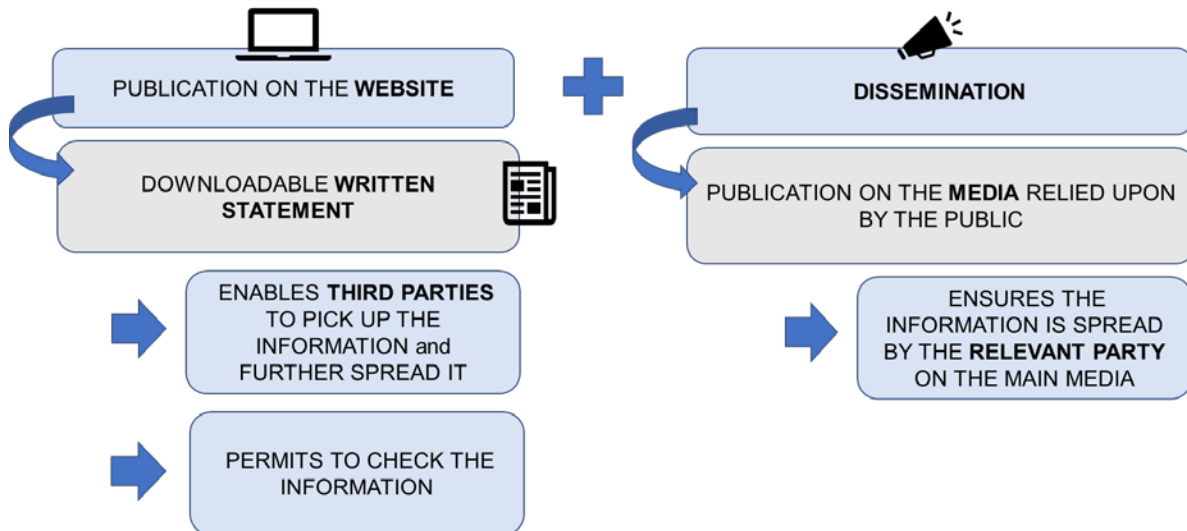
287. With respect to the publication of information on the issuer's website, Article 2 of the draft ITS specifies that the inside information should be published in the form of a downloadable written statement. This requirement would allow for the written statement to be picked up by journalists or news media to further the spread of the information.

288. That Article includes requirements which are equivalent to the ones already contained in the MAR ITS and are aimed, among others, to ensure free of charge access to information and ease in identifying the relevant information on the website, plus some additional requirements aimed at facilitating access to the information by the public.

289. Considering that trading in crypto-assets has a cross border dimension, the ITS includes a provision requiring issuers, offerors and persons seeking admission to trading to publish the information on their website either in the language in which the white-paper of the crypto-asset is drawn up and, where the white-paper is not drawn up in a language customary in the sphere of international finance, in a language customary in the sphere of international finance. It is worth noting that at the time of writing the English language is the language customary in the sphere of international finance. The provision is included to facilitate the access to inside information by investors who do not speak the national language of the issuers, offerors and persons seeking admission to trading.

290. To further facilitate transmission of inside information, Article 2 of MiCA requires that the website of the issuer, the offeror or the person seeking admission to trading should enable investors to receive on a voluntary basis push notifications or alerts on any new publication. ESMA believes that such alerts could enable investors to receive timely notifications of publication of inside information, and hence promote fast access to such information.
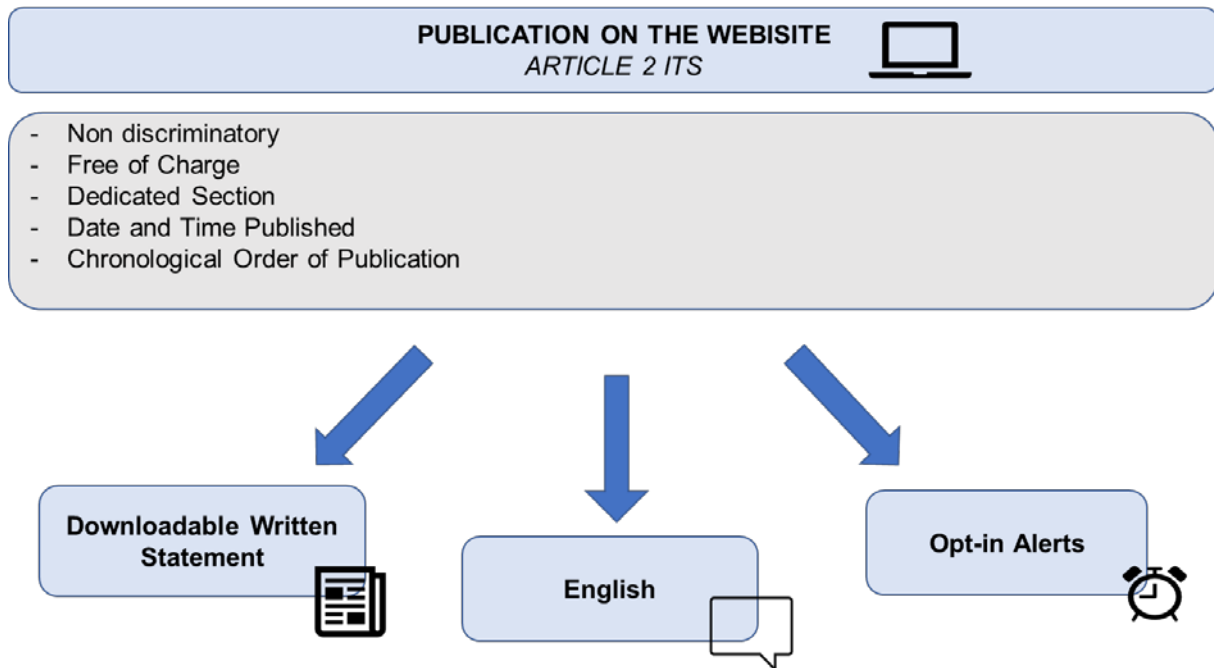
291. Article 3 of the ITS describes the general requirements for dissemination, mandating issuers, offerors and persons seeking admission to trading to disclose the information by means that ensure dissemination to the widest public possible, on a non-discriminatory basis, free of charge and simultaneously throughout the Union. Such requirements are aimed at ensuring that investors have free and equal access to information in the Union to avoid information asymmetries and an unlevel playing field.

292. Similarly, to the MAR ITS, the provision requires the issuer, offeror or person seeking admission to trading to communicate the inside information to the media which are reasonably relied upon by the public. Taking into consideration the sources normally used by the crypto community to collect information, ESMA proposes in the ITS to add some specific media for dissemination of inside information related to crypto assets, which are not foreseen under the MAR ITS. It is worth clarifying that dissemination of inside information under MAR remains regulated by the MAR ITS, and thus the additional media foreseen in the MICA ITS are not to be used to comply with the obligation to disclose inside information under MAR.

293. In particular, the MiCA ITS specifies that the media reasonably relied upon by the public could also be social media and web-based platforms. In respect to social media, ESMA notes that they are often the fora where crypto investors engage in discussions to exchange information on crypto assets. In this respect, they may represent a useful tool to reach the relevant public for the purpose of communicating inside information.

294. ESMA also acknowledges that one of the main tools used by crypto investors to make informed decisions are web-based platforms that aggregate information and/or data on

crypto-assets. The content published on these websites is diversified and can include market data, data analytics, price trackers, research and news. As investors regularly use such web-platforms to collect information on crypto-assets, the ITS includes them within the means for dissemination, in those cases where the platform provides for the possibility to publish news (i.e., a real-time news feed related to a crypto-asset).

295. In line with the general principles for disseminations, all media (including social media and web-based platforms) used for this purpose should grant non-discriminatory and free access to information. To clarify what is meant by 'non-discriminatory' in the context of dissemination, ESMA specified in the recitals that this concept implies that the media is public (even if in some cases a subscription or registration may be required) and that no content is available on a selective (i.e., invite-only or closed group) basis.

296. To ensure the reliability of the information posted and facilitate access to the written statement published by the relevant party, publication on social media and web-based platforms should include a link to the website of the relevant party where the original publication should be available.

297. The draft ITS additionally envisages that if the platforms where the crypto asset is offered for trading allows to post information for dissemination purposes, the inside information could also be posted on the trading platform website. The latter is envisaged as a possibility and not as a duty and it is aimed at promoting the publication of inside information in a more centralised manner, under the assumption that investors may more easily come across information that is posted on the same platform where they intend to trade. Posting on the trading platforms websites should include a link to the website of the relevant party where the written statement could be found, in order to facilitate retrieving such information.

298. Moreover, the ITS specifies some requirements which are essential to ensure that the electronic means used for the disclosure ensure key elements such as completeness, integrity and confidentiality of the information. The ITS also requires that issuers, offerors and persons seeking admission to trading remedy any failure or disruption in the communication of inside information.

FIGURE 4: DISSEMINATION
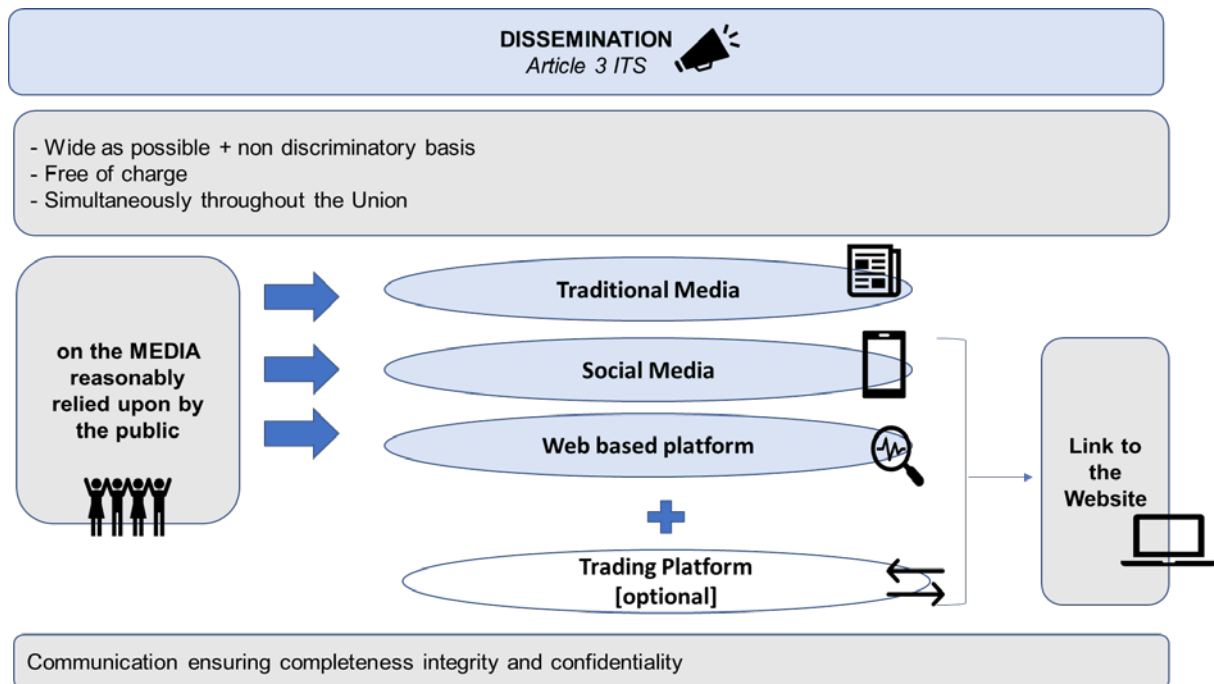
Delayed disclosure of inside information

299. Article 88 of MiCA also requires that where an issuer, offeror or a person seeking admission to trading has delayed the disclosure of inside information it should (i) inform the competent authority of the existence of the delay and (ii) provide a written explanation of how the conditions allowing delayed disclosure were met. The above information should be notified to the competent authority "ex post", i.e., immediately after the information is disclosed to the public, unless the NCA has opted for receiving the record of such an explanation only upon request.

300. In this respect Article 4 of the draft ITS prescribes to issuers, offerors or persons seeking admission to trading (i) how to store selected information pertaining to the delayed disclosure and (ii) how to notify the relevant NCA. With respect to (i), Article 4 envisages that selected information should be stored in a manner that ensures accessibility, readability, and maintenance in a durable medium. With respect to (ii) Article 4 establishes that, to ensure the integrity and confidentiality of the content of the information, as well as the rapidity of the transmission the NCA should be informed in writing and using secure electronic means specified by the same NCA.

301. To promote the standardization of the information, Article 4 of the draft ITS includes a list of elements, analogous to the ones envisaged under MAR ITS, which should be included in the notification. Such elements are included to enable NCAs to (i) identify who is responsible for the communication of the delayed disclosure and (ii) assess if the conditions allowing delayed disclosure were respected. As per (i), the notification should include, among others, specifics on persons producing such notification and

being responsible for the decision to delay the disclosure of inside information. As per (ii), the notification should include, among others, temporal aspects regarding the entering into existence of the inside information and the decision to delay the disclosure of such information.

Q70: Do you agree with the listed definitions? Would you consider useful to clarify any other term used in the ITS?

Q71: Do you agree with the proposed requirements for publication on the website of the issuer, offeror or person seeking admission to trading? Would you consider necessary any additional requirements regarding the publication on the website?

Q72: In your view, is there any obstacle for the website of the relevant parties to allow for specific alerts?

Q73: In your view, what are the media most relied upon by the public to collect information on crypto-assets? In case you are an issuer, offeror or person seeking admission to trading, please specify/add which media you would normally use to communicate with investors and the reasons supporting your choice.

Q74: Should a social media or a web-based platform be media reasonably relied upon by the public, what are the risks that you see when using them to achieve dissemination of inside information in relation to crypto assets? Should the dissemination rather take place through traditional media channel?

Q75: Please comment the proposed means for dissemination of inside information? Please motivate your answer by indicating why the means they are/are not valuable tools for dissemination purposes.

Q76: Would you add any means of communications for the persons subject to the disclosure obligation to consider when disseminating inside information? Please motivate your answer.

Q77: Do you agree with the technical means for delaying the public disclosure of inside information as described?

9 Annexes

9.1 Annex I

Summary of questions

Q1: Do you agree with ESMA's assessment of the mandate for sustainability disclosures under MiCA?

Q2: In your view, what features of the consensus mechanisms are relevant to assess their sustainability impacts, and what type of information can be obtained in relation to each DLT network node?

Q3: Do you agree with ESMA's approach to ensure coherence, complementarity, consistency and proportionality?

Q4: Do you agree with ESMA's approach to mitigating challenges related to data availability and reliability? Do you support the use of estimates in case of limited data availability, for example when data is not available for the entirety of a calendar year?

Q5: What are your views on the feasibility and costs of accessing data required to compute the sustainability metrics included in the draft RTS?

Q6: Do you agree with ESMA's description on the practical approach to assessing the sustainability impacts of consensus mechanisms? If not, what alternative approach would you consider suitable to assess these impacts?

Q7: Do you agree with the definitions proposed in the draft RTS, in particular on incentive structure and on DLT GHG emissions? If not, what alternative wording would you consider appropriate?

Q8: In your view, are the proposed mandatory sustainability indicators conducive to investor awareness? If not, what additional or alternative indicators would you consider relevant?

Q9: Do you consider the proposed optional sustainability indicators fit for purpose? If not, what additional indicators would you consider relevant? Would you agree to making these optional sustainability indicators mandatory in the medium run?

Q10: Do you consider the principles for the presentation of the information, and the template for sustainability disclosures fit for purpose? If not, what improvements would you suggest?

Q11: In your view, are the calculation guidance for energy use and GHG emissions included in the draft European Sustainability Reporting Standards relevant for methodologies in relation to the sustainability indicators under MiCA? If not, what

alternative methodologies would you consider relevant? For the other indicators for which the calculation guidance of the ESRS was not available, do you consider that there are alternative methodologies that could be used? If so, which ones?

Q12: Would you consider it useful that ESMA provides further clarity and guidance on methodologies and on recommended data sources? If yes, what are your suggestions in this regard?

Q13: Is the definition for permissionless DLT in Article 1 sufficiently precise?

Q14: Throughout the RTS, we refer to 'critical or important functions'. The term is borrowed from DORA and does not just capture ICT-specific systems. Does this approach make sense?

Q15: Do you consider subparagraph (e) in Article 4(2) on external communications with clients in the event of a disruption involving a permissionless DLT appropriate for the mandate (i.e., does it constitute a measure that would ensure continuity of services)?

Q16: Should this RTS also specify that CASPs should establish a business continuity management function (to oversee the obligations in the RTS)? In your view, does this fall within the mandate of 'measures' ensuring continuity and regularity?

Q17: Are there other organisational measures to be considered for specific CASP services?

Q18: Do you consider the obligation for CASPs to conduct testing of the business continuity plans in Article 4(4) via an internal audit function appropriate for the mandate?

Q19: In Art. 68(8), CASPs are required to take into account the scale, nature, and range of crypto asset services in their internal risk assessments. Is there support for this general principle on proportionality in Article 6? Do you support the proposed self-assessment under Article 6(2) and in the Annex of the draft RTS?

Q20: Do you agree with the description provided for the different types of CEX and DEX listed?

Q21: For trading platforms: Please provide an explanation of (i) the trading systems you offer to your users, (ii) which type of orders can be entered within each of these trading systems and (iii) whether you consider these trading systems to be a CEX or a DEX (please explain why)?

Q22: Do you consider the trading systems described, and the transparency obligations attached to each trading system, in Table 1 of Annex I of the draft RTS appropriate for the trading of crypto-assets? Do you offer a trading system that cannot meet the transparency requirements under the provisions in this Table? Please provide reasons for your answers.

Q23: Regarding more specifically AMMs, do you agree with the definition included in Table 1 of Annex I of the draft RTS? What specific information other than the mathematical equation used to determine the price and the quantity of the asset in the liquidity pools would be appropriate to be published to allow a market participant to define the price of the assets offered in the liquidity pool?

Q24: Do you agree with ESMA's proposals on the description of the pre-trade information to be disclosed (content of pre-trade information) under Table 2 of Annex I of the draft RTS? If not, please explain why. If yes, please clarify whether any elements should be amended, added and/or removed.

Q25: Do you agree with ESMA's proposals to require a specific format to further standardise the pre-trade information to be disclosed (format of pre-trade information)? If not, please explain why and how the pre-trade information can be harmonised. If yes, please clarify whether any elements should be amended.

Q26: Do you agree with the proposed approach to reserve and stop orders?

Q27: Do you agree with the proposed list of post-trade information that trading platforms in crypto assets should make public in accordance with Tables 1, 2 and 3 of Annex II of the draft RTS? Please provide reasons for your answers.

Q28: Is the information requested in Table 2 of Annex II of the draft RTS sufficient to identify the traded contract and to compare the reports to the same / similar contracts.

Q29: Is there any other information, specific to crypto-assets, that should be included in the tables of Annex II of the draft RTS? Please provide reasons for your answers.

Q30: Do you expect any challenges for trading platforms in crypto assets to obtain the data fields required for publication to comply with pre- and post-trade transparency requirements under Annex I and Annex II of the draft RTS?

Q31: What do you consider to be the maximum possible delay falling under the definition of "as close to real-time as is technically possible" to publish post-trade information in crypto-assets? Please provide reasons for your answer.

Q32: Do you agree with ESMA's approach on the requirements to be included in the draft RTS in relation to a trading platform's operating conditions? Please provide reasons for your answer.

Q33: Do you consider that ESMA should include in the RTS more specific disclosure rules regarding a trading platform's operating conditions, in particular in relation to co-location and access arrangements?

Q34: From your experience, are all crypto-assets trading platforms making their data available free of charge? If not, what specific barriers have you encountered to access the data (e.g., price, level of disaggregation).

Q35: Do you agree with the level of disaggregation proposed in the draft RTS? Please provide reasons for your answer.

Q36: In the context of large number of CASPs and possible different models of data access, what kind of measures (common messages, common APIs, others) would you consider feasible to ensure effective and efficient access to data?

Q37: Do you agree with using the DTI for uniquely identifying the crypto-assets for which the order is placed, or the transaction is executed? Do you agree with using DTI for reporting the quantity and price of transactions denominated in crypto-assets?

Q38: Are there relevant technical attributes describing the characteristics of the crypto-asset or of the DLT on which this is traded, other than those retrievable from the DTIF register? Please detail which ones.

Q39: Do you agree with using the transaction hash to uniquely identify transactions that are fully or partially executed on-chain in orders and transactions records? Please clarify in your response if this would be applicable for all types of DLT, and also be relevant in cases where hybrid systems are used.

Q40: Do you agree that a separate field for the recording of "gas fees" should be included for the purpose of identifying the sequencing of orders and events affecting the order?

Q41: Do you agree with the inclusion of the above data elements, specific for on-chain transactions, in both RTS?

Q42: Are some of the proposed data elements technology-specific, and not relevant or applicable to other DLTs?

Q43: Do you consider it necessary to add a different timing for the provision of identification codes for orders in the case of CASPs operating a platform which uses only on-chain trading?

Q44: Please suggest additional data elements that may be included to properly account for on-chain trading.

Q45: Do you find the meaning of the defined terms clear enough? Should the scope be adjusted to encompass or exclude some market practices? Provide concrete examples.

Q46: Are there other aspects that should be defined, for the purposes of this RTS?

Q47: Do you anticipate practical issues in the implementation of the proposed approach to reception and transmission of orders?

Q48: What transaction information can be retrieved in cases where a CASP execute the order on a third country platform/entity?

Q49: Do you anticipate problems in retrieving information about the buyer/seller to the transaction?

Q50: Do you anticipate practical issues in the implementation of the methods for client identification that are used under MiFIR?

Q51: Do you anticipate practical issues in the implementation of the short selling flag?

Q52: Do you consider that some of the proposed data elements are not applicable/relevant to trading in crypto-assets?

Q53: Do you consider that additional data elements for CAPS operating a trading platform are needed to allow NCAs to properly discharge their supervisory duties?

Q54: Do you believe that a specific definition of routed orders should be provided as it applies to orders that are routed by the trading platform for crypto-assets to other venues? Should this definition include CASPs operating a platform which uses only on-chain trading?

Q55: Do you believe that fill-or kill strategies as referenced in MiFID II apply to trading in platforms for crypto-assets? Do they apply to partially filled orders?

Q56: Do you agree with using messages based on the ISO 20022 methodology for sharing information with competent authorities?

Q57: Do you agree with the criteria proposed for identifying a relevant machine-readable format for the MiCA white paper and consequently with the proposal to mandate iXBRL as the machine-readable format for MiCA white papers, subject to the outcome of the study referred to in paragraph 239?

Q58: If yes, do you agree that the white paper should be required to be a stand-alone document with a closed taxonomy (i.e., without extensions nor complex filing rules)?

Q59: If not, please elaborate your answer and propose alternative solutions that would best meet the criteria identified in section 7.3.

Q60: Are you currently preparing white paper documents in a different machine-readable format? If yes, which one?

Q61: How different is the white paper mandated by MiCA and further specified in this Consultation Paper from any white paper which you have drawn up or analysed prior to MiCA? Do you think that any additional information that used to be included in white papers prior to MiCA but that is no longer allowed under the relevant provisions of MiCA for the white paper will continue to be made available to investors as marketing communication?

Q62. Do you agree with ESMA's estimate of the cost of preparing a white paper in iXBRL format? If not, where would you put the estimate of a preparing a white paper in iXBRL format (not considering costs of information sourcing which should be considered as base scenario)?

Q63: Do you agree with the proposed template for presenting the information as indicated in the Annex to this CP? We welcome your comments on the proposed fields and values/descriptions to be included in the fields - please provide specific references to the fields which you are commenting in your response and pay specific attention to the areas where additional explanatory description of the information is provided.

Q64: Are there additional data elements in the table of fields that would benefit from further explanatory descriptions to ensure that the information provided by a given issuer/offeror is understandable and comparable to the information provided by other issuer/offeror of the same type of crypto-asset? If yes, please elaborate and provide suggestions.

Q65: Would you deem it useful for ESMA to provide an editable template to support preparers with the compliance of the format requirements proposed in the draft ITSs?

Q66: Are there any other data elements that you would consider relevant to ensure that investors can properly compare different crypto-asset white papers and NCA can perform their classifications on the basis of harmonised information?

Q67: Do you agree with ESMA's conclusion that an issuer, an offeror or a person seeking admission to trading of crypto-assets should always be eligible for an LEI? If not, please provide a description of the specific cases

Q68: Do you agree with the proposed metadata elements, also considering the mandatory metadata expected to be mandated in the context of ESAP?

Q69: Do you have any feedback in particular with regards to the metadata on the "industry sector of the economic activities" and its relevance for the ESAP search function?

Q70: Do you agree with the listed definitions? Would you consider useful to clarify any other term used in the ITS?

Q71: Do you agree with the proposed requirements for publication on the website of the issuer, offeror or person seeking admission to trading? Would you consider necessary any additional requirements regarding the publication on the website?

Q72: In your view, is there any obstacle for the website of the relevant parties to allow for specific alerts?

Q73: In your view, what are the media most relied upon by the public to collect information on crypto-assets? In case you are an issuer, offeror or person seeking

admission to trading, please specify/add which media you would normally use to communicate with investors and the reasons supporting your choice.

Q74: Should a social media or a web-based platform be media reasonably relied upon by the public, what are the risks that you see when using them to achieve dissemination of inside information in relation to crypto assets? Should the dissemination rather take place through traditional media channel?

Q75: Please comment the proposed means for dissemination of inside information? Please motivate your answer by indicating why the means they are/are not valuable tools for dissemination purposes.

Q76: Would you add any means of communications for the persons subject to the disclosure obligation to consider when disseminating inside information? Please motivate your answer.

Q77: Do you agree with the technical means for delaying the public disclosure of inside information as described?

9.2 Annex II

9.2.1 RTS on content, methodologies and presentation of sustainability indicators on adverse impacts on the climate and the environment

COMMISSION DELEGATED REGULATION (EU) 2024/XXX

of XXXX

supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying the content, methodologies and presentation of information in respect of sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts

(Text with EEA relevance)

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 Regulation (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937[61], and in particular Articles 6(12), fourth subparagraph, Article 19(11), fourth subparagraph, Article 51(15), fourth subparagraph and Article 66(6), fourth subparagraph thereof,

Whereas:

(1)   The adequate identification and disclosure of adverse impacts on the climate and the environment linked to the use of consensus mechanisms to validate transactions in crypto-assets, notably in relation to the use of energy, renewable energy and natural resources, as well as the production of waste and greenhouse gas (GHG) emissions, is a key element of information to be provided to investors in crypto-assets and to clients of crypto-assets service providers.

(2)   It is important that investors receive easily understandable information and can compare the information on impacts of crypto assets on the climate and the environment. Crypto-asset service providers, through the publication of information

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related to the principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism relating to each crypto-asset in relation to which they provide crypto-assets services, should facilitate the comparisons between such crypto-assets. Crypto-asset service providers should be responsible for providing this information regardless of whether relevant information can also separately be obtained from a crypto-asset white paper.

(3)   Disclosures in the white papers and on the websites of crypto-asset service providers should be reviewed on a regular basis and updated accordingly. The review should ensure coherence across all disclosures in relation to the same crypto-asset. The use of independent third-parties to verify disclosures should be disclosed.

(4)   The primary function of a consensus mechanism is to validate transactions in crypto-assets by means of an agreement between distributed ledger technology (DLT) network nodes that are also responsible for holding records of all transactions on a distributed ledger. The issuance of a crypto-asset is also a result of the validation. The assessment of the impact of the consensus mechanism on the climate and on the environment should therefore encompass the validation of each transaction in the crypto-asset, identifying the DLT network nodes actively involved in the validation, and the maintenance of integrity of a distributed ledger of transactions by all DLT network nodes.

(5)   When different consensus mechanisms are used for the validation of transactions in the same crypto-asset, the adverse impact of each of the relevant consensus mechanisms should be assessed and disclosed.

(6)   In order to provide appropriate context and ensure investor awareness, disclosures on the adverse impacts on climate and on the environment should include a section with general information on the crypto-asset, key indicators, and a description of the features of the consensus mechanism(s) relevant for the assessment of such impacts. In particular, this section should include details on the incentive structure of the consensus mechanism, on the number and location of the DLT network nodes active in reaching an agreement, and on the devices used by these DLT network nodes.

(7)   Key indicators should be used to articulate the impacts of the consensus mechanisms on climate and on the environment in a way that is easy to understand. These key indicators are defined as the yearly average energy consumption, the average energy consumption to validate one transaction, and the yearly average GHG emissions linked to the use of direct and indirect energy sources.

(8)   It is important to ensure their complementarity with other sectoral disclosure requirements, in order to limit the increase of the reporting requirements on entities that may be subject to disclosure requirements under the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD).To this end, this Regulation is aligned to the extent possible with established standards, and in particular the principles for the presentation of information under Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 supplementing Regulation (EU)

2019/2088 of the European Parliament and of the Council (SFDR) the types of emissions identified in Annex III of Regulation (EU) 596/2014 and the calculation guidance within the Commission Delegated Regulation (EU) of XXX supplementing Directive 2013/34/EU of the European Parliament and of the Council (CSDR) as regards sustainability reporting standards[62].

(9)   In order to incentivise the use of more environmentally friendly consensus mechanisms and to prevent greenwashing practices, it is crucial to develop an approach relying to the extent possible on mandatory disclosures of quantitative metrics, complemented with mandatory qualitative statements. Mandatory indicators are those considered to be the most conducive to investor awareness on the impact of consensus mechanisms.

(10)   The same indicators should be used to assess the impacts of all consensus mechanisms in order to ensure comparability and avoid any methodological bias when comparing the impacts across types of consensus mechanisms. In light of the global nature of crypto-asset mining activities, quantitative metrics should display gross energy consumption and emissions, without reflecting potential off-setting mechanisms.

(11)   In addition to key indicators on overall energy consumption, on energy intensity of the validation of transactions and on GHG emissions derived from direct and indirect energy use (scope 1 and 2), mandatory sustainability indicators should include the quantitative metrics on consumption of non-renewable energy, GHG intensity, the generation of hazardous waste and of waste from electrical and electronic equipment, including the ratio of non-recycled waste from electrical and electronic equipment, as well as a description of the impact on natural resources of the use of equipment by DLT network nodes.

(12)   In addition to the mandatory indicators, persons drawing up white papers and crypto-assets service providers should be able to include additional information on optional indicators of impacts on the climate and on the environment that are considered more complex to assess. The optional disclosure of additional indicators should be subject to the same harmonised rules on the presentation of information and on the methodologies as mandatory indicators. This applies in particular to other indirect GHG emissions (scope 3), such as upstream emissions linked to the purchase of equipment by the DLT network nodes or downstream emissions related to waste management.

(13)   In order to foster consistency across disclosures in the absence of consensus on a specific set of reliable methodologies to calculate the identified indicators at this stage, harmonised principles should nonetheless apply and the methodology to calculate each quantitative metric should be disclosed. Disclosures on energy consumption and GHG emissions should be aligned with the calculation guidance included in the Commission Delegated Regulation (EU) of XXX supplementing Directive 2013/34/EU of the

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[62] [Reference to be added pending the OJ publication]

European Parliament and of the Council as regards sustainability reporting standards. Deviations from this calculation guidance should be disclosed when applied.

(14) In cases when information related to indicators is not readily available, estimates can be disclosed together with the reasonable assumptions used to calculate these estimates and details of the best efforts carried out to obtain the information.

(15) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority. The European Securities and Markets Authority has developed these draft regulatory technical standards in cooperation with the European Banking Authority.

(16) The European Securities and Markets 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[63],

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

For the purposes of this Regulation, the following definitions apply:

(a) 'incentive structure' means the set of incentives and penalties that a consensus mechanism uses to economically incentivise distributed ledger technology (DLT) network nodes to co-operate in applying the rules and procedures of the consensus mechanism for the purposes of validating transactions;

(b) 'greenhouse gas (GHG) emissions' means emissions of gases listed in Part 2 of Annex V to Regulation 2018/1999 of the European Parliament and of the Council expressed in tonnes of CO_2-equivalent[64];

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[63] 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).
[64] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p.1).

(c) 'scope 1 DLT GHG emissions' means GHG emissions generated from sources that are controlled by the DLT network nodes applying the rules and procedures of the consensus mechanism;

(d) 'scope 2 DLT GHG emissions' means GHG emissions from the consumption of purchased electricity, steam, or other sources of energy generated upstream from the DLT network nodes applying the rules and procedures of the consensus mechanism;

(e) 'scope 3 DLT GHG emissions' means all indirect GHG emissions that are not covered by points (3) and (4) that occur in the value chain of the DLT network nodes applying the rules and procedures of the consensus mechanism, including both upstream and downstream emissions;

(f) 'energy from renewable sources' or 'renewable energy' means energy from renewable sources or renewable energy as defined in Article 2, point (1), of Directive (EU) 2018/2001 of the European Parliament and of the Council[65];

(g) 'non-renewable energy sources' or 'non-renewable energy' means energy sources other than those referred to in point (6);

(h) 'waste' means waste as defined in Article 2, point (23), of Directive (EU) 2018/2001

(i) 'waste electrical and electronic equipment' (WEEE) means waste electrical or electronic equipment as defined in Article 3(1), point (e), of Directive (EU) 2012/19 of the European Parliament and of the Council [66];

(j) 'non-recycled waste' means any waste not recycled within the meaning of 'recycling' in Article 3(17) of Directive 2008/98/EC of the European Parliament and of the Council;

(k) 'hazardous waste' means hazardous waste as defined in Article 3, point 2, of Directive 2008/98/EC[67];

(l) 'natural resources' means natural resources as defined in Table 2 of Annex II to the Commission Delegated Regulation (EU) of XXX supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards[68].].

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[65] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) (OJ L 328, 21.12.2018, p. 82).
[66] Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (recast) (OJ L 197, 24.7.2012, p. 38).
[67] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).
[68] [Reference to be added pending OJ publication]

Article 2

Presentation of information in the white papers

1. Persons drawing up the crypto-asset white paper referred to in Articles 6, 19 or 51 of Regulation (EU) 2023/1114 shall ensure that the information in the crypto-asset white papers with respect to sustainability indicators disclosed in accordance with this Regulation, complies with Articles 1 to 3 of Commission Implementing Regulation [laying down implementing technical standards for the application of Regulation (EU) No 2023/1114 of the European Parliament and of the Council with regard to forms, formats and templates for the crypto-asset white papers].

Article 3

General principles for the presentation of information by crypto-asset service providers

1. Crypto-asset service providers shall provide the information required by this Regulation free of charge, in a downloadable file, in a way that is easy to read, using characters of readable size and using a style of writing that facilitates its understanding.

2. Crypto-asset service providers shall review and update the information published on their websites in accordance with this Regulation on a regular basis, at least annually, and update the information without undue delay in case of material changes. They shall clearly mention the date of publication of the information and the date of the latest review or update.

3. The disclosure made in accordance with this Regulation shall allow the client to compare the adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanisms and their incentive structures across all the crypto-assets in relation to which the crypto-asset service provider provides crypto-asset services.

4. The disclosures referred to in this Regulation shall be made available by the crypto-asset service provider in at least one of the official languages of the Member State where the crypto-asset service provider has its registered office, or in a language customary in the sphere of international finance.

Where the crypto-asset service provider is carrying out crypto-assets services with respect to a specific crypto-asset in a Member State other than the Member State where it has its registered office, the disclosures referred to in this Regulation for that crypto-asset shall also be made available in an official language of the host Member State, or in a language customary in the sphere of international finance.

Article 4

Disclosures in the white papers and on the websites of crypto-assets service providers

1. Persons drawing up the crypto-asset white paper referred to in Articles 6, 19 or 51 of Regulation (EU) 2023/1114 shall provide in the white paper information on the principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used for the validation of transactions in crypto-assets and for the maintenance of the integrity of the distributed ledger of transactions, in the format of the template set out in Tables 1 and 2 of the Annex.

2. Crypto-asset service providers shall provide on their website information on the principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used for the validation of transactions in crypto-assets and for the maintenance of the integrity of the distributed ledger of transactions in relation to crypto-assets for which they provide crypto-asset services in the format of the template set out in Tables 1 and 2 of the Annex.

3. In the section 'General information and key indicators' in Table 1 of the Annex, the persons referred to in paragraph 1 and crypto-asset service providers shall include all of the following:

   (a) information, including the name, on the person referred to in paragraph 1 or of the crypto-asset service provider providing information on principal adverse impacts on climate and other environment-related adverse impacts;

   (b) name and, where available, identifier of the crypto-asset;

   (c) the reference period of the statement, specifying when estimates are used;

   (d) information on the total energy consumption in the reference period, calculated in accordance with the row 'Energy consumption' in Table 1 of the Annex;

   (e) information on the energy intensity in the reference period, calculated in accordance with the row 'Energy intensity' in Table 1 of the Annex;

   (f) information on the scope 1 and scope 2 GHG emissions in the reference period, calculated in accordance with the rows 'Scope 1 – Controlled' and 'Scope 2 – Purchased' in Table 1 of the Annex.

4. In the section 'Features of the consensus mechanism relevant for principal adverse impacts on the climate and other environment-related adverse impacts' in Table 1 of the Annex, the persons referred to in paragraph 1 and the crypto-asset service providers shall include the description of the features of the consensus mechanism used for the validation of transactions in crypto-assets and for the maintenance of the integrity of the distributed ledger of transactions in relation to crypto-assets, that are relevant for assessing those adverse impacts.

This description shall include details on the incentive structure, information on the number and location of DLT network nodes, and information on the production, use and disposal of the devices used by the DLT network nodes.

5. In the section 'Climate and other environment-related indicators', in Table 1 of the Annex, the persons referred to in paragraph 1 and crypto-assets service providers shall complete all the fields, including a description of the methodology used to calculate the indicators, and may add information on one or more additional climate and other environment-related indicators, as set out in Table 2 of the Annex.

6. The methodologies used to calculate the indicators in Column 3 of Tables 1 and 2 of the Annex shall be rigorous, systematic, objective, capable of validation and applied continuously.

    The indicators on energy referred to in Table 1 and Table 2 of the Annex shall be calculated in accordance with the calculation guidance in point AR 32 of the Appendix A of the European Sustainability Reporting Standard E1 in Annex I to [Commission Delegated Regulation (EU) …/... supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards].

    The indicators on GHG emissions referred to in Tables 1 and 2 of the Annex shall be calculated in accordance with the calculation guidance in points AR 39, 43, 45, 46 and 47 of the Appendix A of the European Sustainability Reporting Standard E1 in Annex I of [Commission Delegated Regulation (EU) …/... supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards].

    Persons referred to in paragraph 1 and crypto-asset service providers shall provide a description of deviations from the calculation guidance referred to in the second and third subparagraphs and an explanation of the reasons for such deviations, where relevant.

7. Where the information on the indicators set out in Tables 1 and 2 of the Annex was subject to a verification by one or more third parties, persons referred to in paragraph 1 and crypto-assets service providers shall indicate it and provide the name or names of the third parties in Column 4 of the relevant Table.

8. Where information relating to any of the indicators of Tables 1 and 2 of the Annex is not readily available, the persons referred to in paragraph 1 and crypto-asset service providers shall provide estimates and details of the best efforts carried out to obtain the information by conducting additional research, cooperating with third party data providers or external experts or making reasonable assumptions, including by disclosing in Column 4 of Table 1 and 2 of the Annex all of the following:

    (a) the methodology used to calculate metrics referred to in Column 3 of the relevant Table and the main assumptions and precautionary principles underlying those estimates;

    (b) the research methodology to estimate missing, unreported, or underreported metrics;

(c) the external data sets used in the estimation of missing, unreported or underreported metrics;

(d) the name and a hyperlink to the website of the external provider of the data on which the estimates are based, where relevant.

9. Where DLT network nodes are using mechanisms to off-set their energy consumption and GHG emissions, the use of these mechanisms may be disclosed in Column 4 of Tables 1 and 2 of the Annex. The effect of off-setting mechanisms shall not be taken into account when computing the metrics in Column 3 of Tables 1 and 2 of the Annex.

Article 5

Entry into force and application

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,

<div style="margin-left:50%">

For the Commission

The President

[For the Commission

On behalf of the President

[Position]

</div>

Template for the presentation of the information on principal adverse impacts on the climate and other environment-related adverse impacts in the crypto-asset white paper and on the website of a crypto-asset service provider

Table 1

Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

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General information and key indicators

[*Person drafting the information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism, name and, where available, LEI*] acting as [*issuer of asset-referenced tokens or of e-money tokens or, for crypto-assets other than asset-referenced tokens or e-money tokens, offeror, person seeking admission to trading of crypto-assets, operator of a trading platform in cases where it draws up the crypto-asset white paper, person drawing up the white paper as referred to in Article 6(1), second subparagraph and 19(1), second subparagraph of Regulation (EU) 2023/1114 or crypto-asset service provider*] is providing information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to validate transactions in [*name of the crypto-asset*] [*where available, identifier of the crypto-asset*] and to maintain the integrity of the distributed ledger of transactions.

The information covers the period from [*date*] to [*date*] [with estimates used for the period from [*date*] to [*date*]].

The validation of transactions in *[name of the crypto-asset]* and the maintenance of the integrity of the distributed ledger of transactions has led to a total energy consumption of [*information referred to in Article 4(3), point (d)*] during [*last calendar year*].

The validation of one transaction in [*name of the crypto-asset*] has led to a total energy consumption of [*information referred to in Article 4(3), point (e)*] on average during [*last calendar year*]. The validation of transactions in [*name of the crypto-asset*] and the maintenance of the integrity of the distributed ledger of transactions has resulted in [*number*] tonnes GHG emissions, [*information referred to in Article 4(3), point (f)*], calculated based on sources owned or controlled by the DLT network nodes (scope 1), and indirect emissions from energy purchased by the DLT network nodes (scope 2), during [*last calendar year*].	

Features of the consensus mechanism[s] relevant for principal adverse impacts on the climate and other environment-related adverse impacts

[*hyperlink to the part of the white paper containing the description of the consensus mechanism*]

[*Information referred to in Article 4(4)*]

[*When different consensus mechanisms are used for the issuance and for the validation of transactions, the impact of each of the relevant consensus mechanisms should be assessed and disclosed accordingly, reflecting the adverse impact of each consensus mechanism*]

<table>
<tr><td colspan="5" align="center">Climate and other environment-related indicators</td></tr>
<tr><td align="center">1</td><td align="center">2</td><td align="center">3</td><td align="center">4</td><td align="center">5</td></tr>
<tr><td></td><td align="center">Adverse sustainability indicator</td><td align="center">Metric</td><td align="center">Source of information, review by third parties, use of data providers or external experts</td><td align="center">Methodology to calculate metrics from information and data obtained</td></tr>
</table>

	Energy consumption	Total amount of energy used, expressed in kilowatt-hours (kWh) per calendar year, for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions		
Energy	Non-renewable energy consumption	Share of energy used generated from non-renewable sources, expressed as a percentage of the total amount of energy used per calendar year, for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions		
	Energy intensity	Average amount of energy used, in kWh, per validated transaction		
GHG emissions	Scope 1 - Controlled	Scope 1 GHG emissions, expressed in tonnes (t) carbon dioxide equivalent (CO2e) per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions		
	Scope 2 – Purchased	Scope 2 GHG emissions, expressed in tCO2e per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions		

	GHG intensity	Average GHG emissions (scope 1 and scope 2) per validated transaction, expressed in kilogram (kg) CO2e per transaction (Tx)		
Waste production	Generation of waste electrical and electronic equipment (WEEE)	Total amount of WEEE generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in tonnes per calendar year		
	Non-recycled WEEE ratio	Share of the total amount of WEEE generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, not recycled per calendar year, expressed as a percentage		
	Generation of hazardous waste	Total amount of hazardous waste generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in tonnes per calendar year		
Natural resources[69]	Impact of the use of equipment on natural resources	Description of the impact on natural resources of the production, the use and the disposal of the devices of the DLT network nodes		

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[69] For the purpose of this metric, natural resources shall include but may not be limited to: water, fossil fuels, and critical raw materials.

Table 2

Additional climate and other environment-related indicators

1	2	3	4	5
	Adverse sustainability indicator	**Metric**	**Source of information, review by third parties, use of data providers or external experts**	**Methodology to calculate metrics from information and data obtained**
Energy	Energy mix	Share of energy from non-renewable sources used for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, broken down by each non-renewable energy source, expressed as a percentage		
	Carbon intensity	Carbon intensity of the energy used for the validation of transactions and the maintenance of the integrity of the		

		distributed ledger of transactions, expressed in kgCO2e per kWh		
	Energy use reduction	Energy use reduction targets or commitments, expressed in absolute or relative reduction of energy use over one calendar year		
GHG emissions	Scope 3 - Value chain	Scope 3 GHG emissions for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in tCO2e per calendar year		
	GHG emissions reduction targets or commitments	GHG emissions reduction targets or commitments, expressed in terms of absolute or relative reduction in GHG emissions over one calendar year		
Waste production	Generation of waste (all types)	Total amount of waste generated by the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in tonnes per calendar year		
	Non-recycled waste ratio (all types)	Share of the total amount of waste generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of		

		transactions not recycled per calendar year		
	Waste intensity (all types)	Total amount of waste generated per transaction validated, expressed in gram per transaction		
	Waste reduction targets or commitments (all types)	Waste reduction targets or commitments, expressed in absolute or relative reduction in waste generation over one calendar year		
Natural resources[70]	Natural resources use reduction targets or commitments	Natural resources use reduction targets or commitments, expressed in absolute or relative reduction in use of natural resources over one calendar year		
	Water use	Total water consumption linked to the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in cubic meters		
	Non recycled water ratio	Share of the total water consumed not recycled and not reused linked to the validation of transactions and the maintenance of the integrity of the		

[70] For the purpose of these metrics, natural resources shall include but may not be limited to: water, fossil fuels, and critical raw materials.

		distributed ledger of transactions per calendar year, expressed as a percentage		

9.2.2 RTS on measures that crypto-asset service providers must take to ensure continuity and regularity in the performance of services

COMMISSION DELEGATED REGULATION (EU) 2024/XXX

of XXXX

supplementing Regulation (EU) No 2023/1114 of the European Parliament and of the Council on markets in crypto-assets with regard to regulatory technical standards on continuity and regularity in the performance of crypto-asset services

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) No 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets and amending Regulation (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937[71], and in particular Article 68(10), point (a) thereof,

Whereas:

(1)   Ensuring continuity and regularity in the performance of crypto-asset services is imperative to maintain orderly conditions in the crypto-asset market and to protect investors from adverse disruptions that may affect their investments. To maintain the resilience of their critical or important functions and hence the availability of their services, crypto-asset service providers should establish adequate governance arrangements for compliance, staffing, and outsourcing. As part of their organisational requirements, crypto-asset service providers should employ management and staff with adequate knowledge, skills, and expertise to perform their functions, including through the preparation of a business continuity policy and implementation of a business continuity plan.

(2)   Articles 11 and 12 of Regulation (EU) 2022/2554 of the European Parliament and of the Council[72] provide for requirements relating to response and recovery, backup policies and procedures, restoration and recovery procedures and methods concerning the ICT systems of crypto-asset services providers. The [Commission Delegated Regulation (EU) …/… on ICT risk management framework] further specifies components of the ICT business continuity policy, the testing of ICT business continuity

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[71] OJ L 150, 9.6.2023, p.40.
[72] Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014, (EU) No 909/2014 and (EU) 2016/1011 (OJ L 333, 27.12.2022, p. 1).

plans, the components of the ICT response and recovery plans of crypto-asset service providers. This Regulation complements those provisions of Regulation (EU) 2022/2554 and of [Commission Delegated Regulation (EU) …/… on ICT risk management framework] with respect to continuity and regularity in the performance of the crypto-asset services.

(3)   Assessing the appropriate measures a crypto-asset service provider should take to ensure the regularity and continuity of their services depends on the nature of the disruption. In the event of a disruption involving a permissionless distributed ledger technology, crypto-asset service providers should communicate with their clients as part of their business continuity plans. Such communication should include essential information for the client, including updates on when services may be expected to be resumed, information related to the reason for the disruptive incident affecting a distributed ledger once such information becomes available, how many DLT network nodes have been affected, whether client funds are at risk, and how the distributed ledger will be brought back online.

(4)   To avoid excessive or disproportionate administrative burden for small and medium-enterprises (SMEs) and start-ups that would fall under scope of this Regulation, crypto-asset service providers should consider the scale, nature, and range of their services provided in their business continuity arrangements. The specific business continuity requirements for crypto-asset service providers should be determined by means of a robust self-assessment. Crypto-asset service providers should include in their self-assessment the criteria listed in the Annex of this Regulation. That self-assessment should include any other circumstances not expressly set out that may have an impact on the crypto-asset service provider.

(5)   This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority.

(6)   The European Securities and Markets 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[73],

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

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[73] 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).

1. For the purposes of this Regulation, the following definitions shall apply:

   (a) 'critical or important function' means a critical or important function as defined in Article 3, point (22) of Regulation (EU) 2022/2554 of the European Parliament and of the Council[74];

   (b) 'permissionless distributed ledger technology' means a technology that enables the operation and use of distributed ledgers in which no entity controls the distributed ledger or its use or provides core services for the use of such distributed ledger, and DLT network nodes can be set up by any persons complying with the technical requirements and the protocols.

Article 2

Business continuity organisational arrangements

1. Crypto-asset service providers shall have dedicated resources in charge of adopting plans, procedures, and measures that comprise the business continuity policy specified in Article 3.

2. The crypto-asset service provider's management body shall define and endorse the plans, procedures, and measures that comprise the business continuity policy. The crypto-asset service provider's management body shall also be responsible for their implementation and for reviewing their effectiveness on at least an annual basis.

3. Crypto-asset service providers shall establish adequate procedures to ensure that updated information on business continuity arrangements is transmitted to all relevant internal staff and external stakeholders.

Article 3

Business continuity policy

1. Crypto-asset service providers shall be able to demonstrate at all times that the systems critical to the operation of their business functions have sufficient stability by having an effective business continuity policy to address disruptive incidents or performance issues. The business continuity policy shall be documented in a durable medium and periodically reviewed in accordance with Article 2 (2).

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[74] Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014, (EU) No 909/2014 and (EU) 2016/1011 (OJ L 333, 27.12.2022, p. 1).

2. Crypto-asset service providers shall include in the business continuity policy all of the following:

(a) a definition of the scope, including limitations and exclusions, to be covered by the business continuity plans, procedures and measures;

(b) a description of the criteria to activate the business continuity plans;

(c) provisions on the governance and organisation including roles, responsibilities and escalation procedures to implement the business continuity policy and to ensure that sufficient resources are available;

(d) provisions on the alignment between the general business continuity plans and the ICT-specific business continuity plans, and ICT response and recovery plans referred to in [Articles 26 and 27 of Commission Delegated Regulation (EU) …/… on ICT risk management framework];

(e) provisions on the review of the effectiveness of the implemented business continuity plans, in accordance with Article 5 (2).

Article 4

Business continuity plans

1. Crypto-asset service providers shall establish business continuity plans to implement the business continuity policy provided for in Article 3. The business continuity plans shall set out the procedures for managing disruptive incidents. The business continuity plans shall support objectives to protect and, where necessary, re-establish the confidentiality, integrity, and availability of client data, and availability of the business functions, supporting processes and information assets of the crypto-asset service providers.

2. The business continuity plans shall provide for the following minimum content:

(a) a range of possible adverse scenarios relating to the operation of critical or important functions, including the unavailability of business functions, staff, workspace, external suppliers or data centres or loss or alteration of critical data and documents;

(b) the procedures and policies to be followed in case of a disruptive event, including necessary measures to recover critical or important functions consistent with recovery time objectives and recovery point objectives and the maximum time to resume services;

(c) procedures and policies for relocating the business functions used to provide crypto-asset services to a back-up site;

(d) back-up of critical business data including up-to-date information of the necessary contacts to ensure communication inside the crypto-asset service provider, between the crypto-asset service provider and its clients and between the crypto-asset service provider and the infrastructures on which its services rely;

(e) procedures for timely external communications with clients in the event of a disruption involving a permissionless distributed ledger used by the crypto-asset service provider in the provision of its services. The crypto-asset service provider shall ensure that the communication to clients includes information on when the services are expected to be resumed, on the reasons and the impact of the incident, and on risks concerning clients' funds and crypto-assets held on their behalf.

3. The business continuity plans shall set out procedures to address any disruptions of outsourced critical or important functions, including where those critical or important functions become unavailable.

4. Crypto-asset service providers shall, where considered necessary, having regard to the results of the annual review conducted in accordance with Article 2 (2), ensure that a review of their business continuity plans is carried out by either an independent assessor or a department within the crypto-asset service provider other than the one responsible for the function under review.

Article 5

Periodic testing of the business continuity plans

1. Crypto-asset service providers shall test on the basis of realistic scenarios the operation of the business continuity plans in Article 4. Such testing shall verify the capability of the crypto-asset service provider to recover from disruptive incidents and to resume services in accordance with Article 4 (2) (b).

2. Crypto-asset service providers shall test the business continuity plans at least once a year taking into account the results of the tests, the most recent threat intelligence, lessons derived from previous events and, where relevant, any changes in the recovery objectives, including recovery time objectives and recovery point objectives, and/or changes in the business functions.

3. Crypto-asset service providers shall document in writing and store the results of the testing activity and submit them to the crypto-asset service provider's management body as well as to the operating units involved in the business continuity plans.

4. Crypto-asset service providers shall ensure that testing of the business continuity plans does not interfere with normal conduct of services.

Article 6

Complexity and risk considerations

1. In establishing the business continuity policy, and the related plans, procedures and measures, crypto-asset service providers shall take into account elements of increased complexity or risk, including the type and range of crypto-asset services offered, the extent to which permissionless distributed ledger technology is used, and the potential impact of the disruptions on the continuity and availability of the crypto-asset service provider's activities.

2. For the purposes of paragraph 1, crypto-asset service providers shall, at least once a year, carry out a self-assessment of the scale, the nature and range of their services. The self-assessment shall analyse the applicable criteria set out in the Annex to this Regulation and any other criteria that the crypto-asset service provider considers relevant.

Article 7

Entry into force and application

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]

ANNEX

Criteria for the self-assessment of crypto-asset service providers

(a) Nature of the crypto-asset service provider, in terms of:

(i) the class designation under Annex IV of Regulation (EU) No 2023/1114

(ii) the average liquidity levels or market depth of crypto-assets available to trade on a trading platform for crypto-assets;

(iii) the role of the crypto-asset service provider in the financial system, including whether the crypto-asset service provider operates a trading platform for crypto assets and whether crypto-assets traded on its platform are traded on other trading platforms for crypto-assets.

(b) Scale, in terms of potential impact of the crypto-asset service provider on the fair and orderly functioning of the markets based on at least the following elements:

(i) the number of clients and/or the average value of the assets held in custody;

(ii) the volume of trading executed on a trading platform for crypto-assets;

(iii) the number of transfers of crypto-assets conducted on behalf of clients;

(iv) the number of orders executed on behalf of clients;

(vi) the number of countries in which the crypto-asset service provider is undertaking business activity.

(c) Complexity, in terms of:

(i) the structure of the crypto-asset service providers in terms of ownership and governance and its organisational, operational, technical, physical, and geographical presence;

(ii) the level of outsourcing of the crypto-asset service providers and in particular where any critical or important operational functions have been outsourced;

(iv) the number and type of distributed ledgers used in the execution of services;

(v) the number of DLT network nodes the crypto-asset service provider operates on a distributed ledger;

(v) the number of smart contracts deployed and maintained by the crypto-asset service provider;

(vi)   how the private cryptographic keys of clients are secured under safekeeping;

(vii)   the use of software and hardware-based custodial wallets or wallets that secure cryptographic keys using multiple fiduciaries.

COMMISSION DELEGATED REGULATION (EU) 2024/XXX

of XXXX

supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying the manners in which transparency data for crypto-asset service providers operating a trading platform for crypto-assets is to be presented

(Text with EEA relevance)

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 Regulation (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937[75], and in particular Article 76(16), first subparagraph, point (a) thereof,

Whereas:

(1)   A high degree of transparency is essential to ensure that investors are adequately informed as to the true level of actual and potential transactions in crypto-assets traded on a trading platform operated by a crypto-asset service provider. This high degree of transparency should also ensure a level playing field between trading platforms so that the price discovery process in respect of particular crypto-assets is not impaired by the fragmentation of liquidity, and investors are not thereby penalised.

(2)   In order for investors to be adequately informed about access, costs, scope, functioning of trading platforms they use or intend to use, it is important for trading platforms to make available their operating rules in a transparent and non-discriminatory manner. Investors should have easy access to this information.

(3)   Trading platforms for crypto-assets should publicly disclose all orders on a continuous basis and transactions as close to real-time as is technically possible on their platforms. It is important to harmonise the information to be published so as to allow investors to use, compare and aggregate the information published from different trading platforms for crypto-assets.

(4)   In order to ensure a level playing field between all types of investors, both qualified investors and retail holders, regarding the access to order management facilities,

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trading platforms for crypto assets may offer reserve and stop orders directly through their trading platform when certain conditions are met in accordance with this Regulation.

(5) It is also appropriate to clarify the applicable transparency data applicable to those trading systems that would normally be available in an on-chain context such as Automated Market Maker (AMM) models, including the mathematical formula used to determine the price in the liquidity pool and, if applicable, a price simulator. .

(6) Information which is required to be made available as close to real time as possible should be made available as instantaneously as technically feasible, assuming a reasonable level of efficiency of the systems of the crypto-asset service providers operating a trading platform for crypto-assets. The publication of the information close to the maximum time limit should occur only in exceptional cases where the systems available do not allow for a publication in a shorter period of time.

(7) It is necessary to specify the level of disaggregation by which trading platforms should be able to sell data. Crypto-asset service providers operating a trading platform for crypto-assets should disaggregate data by, as a minimum, the type of crypto-asset (asset-referenced tokens, e-money tokens, crypto-assets other than asset-referenced tokens and e-money tokens), the currency in which the crypto-assets are traded, and the type of trading system. This data should be available on a crypto-asset basis when available. Time-series data should be available on at least a weekly historical basis, however, trading platforms for crypto assets may also offer historical data in shorter intervals.

(8) To ensure that pre-trade and post-trade data offered for purchase appropriately matches the demand from market participants, crypto-asset service providers operating a trading platform should offer any combination of the disaggregation criteria on a reasonable commercial basis.

(9) This Regulation is based on the draft regulatory technical standards submitted by the European Securities and Markets Authority (ESMA) to the Commission.

(10) ESMA 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[76],

HAS ADOPTED THIS REGULATION:

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[76] 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).

Article 1

General principles of presentation of the information on operating rules for trading platforms

1. Crypto-assets service providers operating a trading platform for crypto-assets shall publish the information on the operating rules for their trading platform free of charge and in a manner that is easily accessible, non-discriminatory, prominent, comprehensible, fair, clear and not misleading.

2. Crypto-assets service providers operating a trading platform for crypto-assets shall present the information on operating rules for trading platforms in a way that is easy to read and use a style that facilitates its understanding.

3. Crypto-assets service providers operating a trading platform for crypto-assets shall make available the operating rules for their trading platform in a single document and publish them on the crypto-asset service provider's website.

Article 2

Pre-trade transparency

1. Crypto-asset service providers operating a trading platform for crypto-assets shall make public the range of bid and offer prices and the depth of trading interest at those prices, in accordance with the type of trading systems they operate as listed in Table 1 of Annex I.

2. With respect to orders which meet all of the following conditions:

   (a) are contingent on the occurrence of objective market conditions which are pre-defined by the trading system's protocol;

   (b) cannot interact with other trading interests prior to disclosure to the order book operated by the trading platform;

   (c) once disclosed to the order book, interact with other orders in accordance with the rules applicable to orders of that kind at the time of disclosure,

   crypto-asset service providers operating a trading platform for crypto-assets shall make such orders public when the pre-determined market conditions in point (a) materialise.

3. Crypto-asset service providers operating a trading platform for crypto-assets shall make public the details of each order as set out in Tables 2 and 3 of Annex I.

Article 3

Post-trade transparency

1. Crypto-asset service providers operating a trading platform for crypto-assets shall make public the details of each transaction as set out in Tables 1 and 2 of Annex II.

2. Where a previously published trade report is cancelled, crypto-asset service providers operating a trading platform for crypto-assets shall make public a new trade report which contains all the details of the original trade report and the cancellation flag specified in Table 3 of Annex II.

3. Where a previously published trade report is amended, crypto-asset service providers operating a trading platform for crypto-assets shall make the following information public:

   (a) a new trade report that contains all the details of the original trade report and the cancellation flag specified in Table 3 of Annex II;

   (b) a new trade report that contains all the details of the original trade report with all necessary details corrected and the amendment flag specified in Table 3 of Annex II.

Article 4

Real time publication of transactions

For transactions executed on their crypto-asset trading platforms, crypto-asset service providers operating a trading platform for crypto-assets shall make public the details of each transaction as set out in Tables 1, 2 and 3 of Annex II as close to real-time as is technically possible and in any case within thirty seconds after the execution of the transaction.

Article 5

Disaggregation of pre-trade and post-trade data

1. Crypto-asset service providers operating a trading platform for crypto-assets shall make the information published in accordance with Articles 2 and 3 available to the public by publishing pre-trade and post-trade transparency data separately.

2. Crypto-asset service providers operating a trading platform for crypto-assets shall upon request make the information published in accordance with Articles 2 and 3 available to the public by presenting pre-trade and post-trade data disaggregated for each crypto-asset.

3. Crypto-asset service providers operating a trading platform for crypto-assets shall make available the data referred to in paragraph 2 for minimum periods of one week.

4. In addition to presenting the data in accordance with paragraph 2, crypto-asset service providers operating a trading platform may present the data referred to in paragraph 2 in bundles.

5. Paragraphs 1 to 4 shall not apply where the information referred to in Articles 2 and 3 is made available free of charge.

Article 6

Entry into force and application

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]

ANNEX I

Pre-trade information to be made public

Table 1

Description of the type of trading systems and the related information to be made public in accordance with Article 1

#	Type of trading system	Description of the trading system	Information to be made public
1	Continuous auction order book trading system	A system that by means of an order book and a trading algorithm operates without human intervention and matches sell orders with buy orders on the basis of the best available price on a continuous basis.	The aggregated number of orders and the crypto-assets that they represent at each price level for at least the five best bid and offer price levels.
2	Quote-driven trading system	A system where transactions are concluded on the basis of firm quotes that are continuously made available to participants.	The best bid and offer by price of each participant in crypto-assets traded on the trading system, together with the volumes attaching to those prices. The quotes made public shall be those that represent binding commitments to buy and sell the crypto-assets and which indicate the price and volume of crypto-assets in which the participants are prepared to buy or sell.
3	Periodic auction trading system	A system that matches orders on the basis of a periodic auction and a trading algorithm	The price at which the auction trading system would best satisfy its trading algorithm in respect of crypto-assets traded on the trading system and the volume that would potentially be

		operated without human intervention.	executable at that price by participants in that system.
4	Automated market makers	A decentralised protocol relying on liquidity pools and smart contracts which allows the execution of individual transactions in a permissionless and automatic way.	The mathematical equation used to determine the price and the quantity of the crypto-assets in the liquidity pools and any further information and parameters that allow to determine the price at which a specific order would be executed.
5	Hybrid trading system	A system falling into two or more of the types of trading systems referred to in rows 1 to 4 of this table.	For hybrid trading systems that combine different trading systems at the same time, the requirements correspond to the pre-trade trade transparency requirements applicable to each type of trading system that forms the hybrid system. For hybrid trading systems that combine two or more trading systems subsequently, the requirements correspond to the pre-trade transparency requirements applicable to the respective trading system operated at a particular point in time
6	Any other trading system	Any other type of trading system.	Adequate information as to the level of orders or quotes and of trading interests in respect of crypto-assets traded on the trading system; in particular, the five best bid and offer price levels and/or two-way quotes of each market maker in the crypto-assets, if the characteristics of the price discovery mechanism so permit.

Table 2

Symbol table for Table 3

Symbol	Data type	Definition
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CURRENCYCODE_3}	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.dddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' – means that the letter 'T' shall be used; — 'hh' is the hour; — 'mm' is the minute; — 'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be reported in UTC.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. decimal separator is '.' (full stop); negative numbers are prefixed with '-' (minus); Values are rounded and not truncated.
{DTI}	9 alphanumerical characters	ISO 24165 DTI code
{DTI_SHORT_NAME}	n alphanumeric characters	DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383

Table 3

List of details for the purpose of pre-trade transparency

#	Field identifier	Description and details to be published	Format to be populated as defined in Table 2
1	Submission date and time	Where the orders and quotes do not have to be published on an aggregated basis, the date and time when the order or quote was introduced for execution into the trading system.	{DATE_TIME_FORMAT}
2	Crypto-asset identification code	Unique and unambiguous identifier of the crypto-asset	{DTI}
3	Crypto-asset full name	Full name of the crypto-asset.	{ALPHANUM-350}
5	Buy-sell indicator	To show if the order is to buy or sell.	'BUYI' — buy 'SELL' — sell
6	Price	The price of orders and quotes as required for each trading system in Table 1 of Annex I and excluding, where applicable, commission and accrued interest. Where price is expressed in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. This field shall be left blank in case of market orders.	{DECIMAL-18/13} in case the price is expressed in monetary value {DECIMAL-11/10} in case the price is expressed in percentage or yield. {DECIMAL-18/17} in case the price is expressed in basis points.
7	Price currency	Where the price of the crypto-asset is expressed in monetary terms and is not expressed in a currency pair, the ISO currency code or the DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI. Where price of the crypto-asset is expressed in monetary terms and it is expressed in a currency pair, the currency pair in which the price for the crypto-asset related to the order is expressed shall be	{CURRENCYCODE_3} or {DTI_SHORT_NAME} / {CURRENCYCODE_3} or {DTI_SHORT_NAME} {CURRENCYCODE_3} should be used for fiat currencies; and {DTI_SHORT_NAME} should be used for crypto assets

| | | reported. The first currency code shall be that of the base currency and the second currency code shall be that of the quote currency. The quote currency determines the price of one unit of the base currency.

If the price of the crypto-asset is not expressed in monetary value, this field shall be left blank. | |
|---|---|---|---|
| 8 | Price notation | Indicates whether the price is expressed in monetary value, in percentage, in yield, in basis points. | MONE' — Monetary value

'PERC' — Percentage

'YIEL' — Yield

'BAPO' — Basis points |
| 9 | Quantity | For crypto-assets traded in units, the number of units of the number of units of the crypto-asset.

For crypto-assets not traded in units, the nominal or monetary value of the crypto-asset expressed in the same currency of the price in Field 6 "Price", as per Field 7 "Price currency".

If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.

Where Table 1 requires the aggregated publication of orders, the total number of units or the total nominal or monetary value of aggregated orders. | {DECIMAL-18/17} in case the quantity is expressed as number of units

{DECIMAL-18/5} where the quantity is expressed as monetary or nominal value.

{DECIMAL-18/13} in case the price is expressed in sub-components of that crypto-asset |
| 10 | Quantity currency | Currency in which the quantity is expressed.

This field shall be populated where the quantity is expressed as a nominal monetary value or crypto asset units. Otherwise, this field shall be left blank. | {CURRENCYCODE_3}

{DTI} |

| 11 | Venue | Identification of the crypto-asset trading platform where the order was submitted.

If the crypto-asset trading platform uses segment MICs, then the segment MIC shall be used.

If the crypto-asset trading platform does not use segment MICs, then the operating MIC shall be used. | {MIC} |
|----|-------|---------|------|
| 12 | Number of orders and quotes | The number of aggregated orders or quotes from different clients (where aggregated information is required under Table 1 of Annex I). | {DECIMAL-18/0} |
| 13 | Trading system | Type of trading system where the order or quote is advertised | 'CLOB' for continuous auction order book trading systems, 'QDTS' for quote driven trading systems, 'PATS' for periodic auction trading systems, 'HYBR' for hybrid trading systems, 'AMMS' for automated market makers, 'XXXX' for any other trading system |
| 14 | Publication date and time | Date and time when the information was published. | {DATE_TIME_FORMAT} |

ANNEX II

Post-trade information to be made public

Table 1

Symbol table

Symbol	Data type	Definition
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CURRENCYCODE_3}	3 alphanumerical characters	3-letter currency code, as defined by ISO 4217 currency codes
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.dddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; —'T' — means that the letter 'T' shall be used — 'hh' is the hour; — 'mm' is the minute; —'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be reported in UTC.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. —decimal separator is '.' (full stop); —negative numbers are prefixed with '–' (minus); Where applicable, values shall be rounded and not truncated.

{DTI}	8 alphanumerical characters	Digital token identifier as defined in ISO 24165 standard
{DTI_SHORT_NAME}	n alphanumerical characters	DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383

Table 2

List of details for the purpose of post-trade transparency

Field no	Field identifier	Content to be reported	Formats and standards to be used for reporting
1	Trading date and time	Date and time when the transaction was executed.	{DATE_TIME_FORMAT}
3	Crypto-asset identification code	Unique and unambiguous identifier of the crypto-asset.	{DTI}
4	Crypto-asset full name	Full name of the crypto-asset.	{ALPHANUM-350}
3	Price	The price of the executed transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. In the case of a strategy transaction, this field shall be populated with the spread price of the strategy. Where price is currently not available but pending ('PNDG') or not applicable ('NOAP'), this field shall not be populated.	{DECIMAL-18/13} when the price is expressed in monetary value. {DECIMAL-11/10} when the price is expressed in percentage or yield. {DECIMAL-18/17} in case the price is expressed in basis points.

4	Missing Price	Where price is currently not available but pending, the value shall be 'PNDG'. Where price is not applicable, the value shall be 'NOAP'.	'PNDG' in case the price is not available 'NOAP' in case the price is not applicable
5	Price currency	Where the price of the crypto-asset is expressed in monetary terms and is not expressed in a currency pair, the ISO currency code or the DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI. Where price of the crypto-asset is expressed in monetary terms and it is expressed in a currency pair, the currency pair in which the price for the crypto-asset of the executed transaction shall be reported. The first currency code shall be that of the base currency and the second currency code shall be that of the quote currency. The quote currency determines the price of one unit of the base currency. If the price of the financial instrument is not expressed in monetary value, this field shall be left blank.	{CURRENCYCODE_3} or {DTI_SHORT_NAME} / {CURRENCYCODE_3} or {DTI_SHORT_NAME} {CURRENCYCODE_3} should be used for fiat currencies; and {DTI_SHORT_NAME} should be used for crypto assets
6	Price notation	Indicates whether the price is expressed in monetary value, in percentage, in yield, in basis points.	'MONE' – Monetary value 'PERC' – Percentage 'YIEL' – Yield 'BAPO' — Basis points
7	Quantity	For crypto-assets traded in units, the number of units of the crypto-assets in the order.	{DECIMAL-18/17} in case the quantity is expressed as number of units

		For crypto-assets not traded in units, the nominal or monetary value of the crypto-asset. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/5} where the quantity is expressed as monetary or nominal value. {DECIMAL-18/13} in case the price is expressed in sub-components of that crypto-asset
8	Venue of execution	Identification of the crypto-asset trading platform where the order was submitted. If the crypto-asset trading platform uses segment MICs then the segment MIC shall be used. If the crypto-asset trading platform does not use segment MICs then the operating MIC shall be used.	{MIC} – crypto-asset trading platform
10	Publication date and time	Date and time when the transaction was published by a crypto asset trading platform.	{DATE_TIME_FORMAT}
11	Venue of Publication	Code used to identify the crypto-asset trading platform publishing the transaction.	{MIC} – crypto-asset trading platform
12	Transaction identification code	Alphanumerical code assigned by crypto-asset trading platforms trading venues (pursuant to Article 12 of Commission Delegated Regulation (EU) xx/xxx (RTS drafted in accordance with Article 76(16)(b) of MiCA) used in any	{ALPHANUM-52}

		subsequent reference to the specific trade.	

Table 3

List of flags for the purpose of post-trade transparency

Flag	Name	Description
'CANC'	Cancellation flag	When a previously published transaction is cancelled.
'AMND'	Amendment flag	When a previously published transaction is amended.

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 specifying the content and format of order book records for crypto-asset service providers operating a trading platform for crypto-assets

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[77], and in particular Article 76(16), point (b) thereof,

Whereas:

(1) Crypto-asset service providers operating platforms for crypto-assets should keep records of relevant data relating to all orders in crypto-assets in an electronic and machine-readable format developed in accordance with the ISO 20022 methodology in order to enable competent authorities to perform effective and efficient collation, comparison and analysis of the relevant order data.

(2) Since crypto-assets that are not financial instruments are typically neither uniquely identifiable by existing codes which are widely used in financial markets, such as the International Securities Identification Numbers (ISIN), nor describable by using the ISO Classification of Financial Instruments (CFI) code, a new and universal method of identification and classification has to be developed. For the purpose of identifying crypto-assets, the European Securities and Markets Authority (ESMA) established by Regulation (EU) No 1095/2010 of the European Parliament and of the Council ([78]) considers that the Digital Token Identifier (DTI) is appropriate as it follows the principles of uniqueness, neutrality, reliability, open source, scalability, accessibility on a cost-recovery basis, is offered under an appropriate governance framework and is adopted for use in the Union. For the purpose of classifying crypto-assets, the ISO CFI is being revised to accommodate for the classification of crypto-assets and the revision will not be finalised before the application of this Regulation. Until the revised CFI standard

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[77] OJ L 150, 9.6.2023, p. 40.
[78] 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).

becomes available, an interim taxonomy indicating the type of crypto-assets as prescribed in this Regulation should be used.

(3) Abusive behaviours, including market manipulation, may be carried through several techniques, including algorithmic trading.. Therefore, in order to ensure effective market surveillance, where investment decisions are made by a person other than the client or by a computer algorithm, the person or algorithm should be identified in the order and transaction records using unique, robust and consistent identifiers. Where more than one person makes the investment decision, the person taking the primary responsibility for the decision should be identified in the record.

(4) In order to ensure consistent and robust identification of natural persons referred to in order records, they should be identified by a concatenation of the country of their nationality followed by identifiers assigned by the country of nationality of those persons. Where those identifiers are not available, natural persons should be identified by identifiers created from a concatenation of their date of birth and name.

(5) In order to facilitate market surveillance, client identification should be consistent, unique and robust. Order records should therefore include the full name and date of birth of clients that are natural persons and should identify clients that are legal entities by their legal entity identifiers (LEIs).

(6) Manual or algortmic abusive behaviours can occur also when determining the trading platform for crypto-asset to access or the crypto-asset service provider to which the orders are to be transmitted or any other conditions related to the execution of the order. Therefore, in order to ensure effective market surveillance, a person or computer algorithm within the crypto-asset service provider that is performing such activities should be identified in the order records.

(7) In order to safeguard the effectiveness of market abuse surveillance, legal persons submitting orders in crypto-assets should be consistetly and uniquely identified in accordance with internationally established principles.

(8) This Regulation is based on the draft regulatory technical standards submitted to the Commission by ESMA.

(9) ESMA 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010.

HAS ADOPTED THIS REGULATION:

Article 1

Scope, standards and format of relevant order data

1. Crypto-asset service providers operating a trading platform for crypto-assets shall keep at the disposal of their competent authority the data set out in Articles [3 to 18] of each order in crypto-assets advertised through their systems as specified in Tables [2 and 3] of the Annex insofar as they pertain to the order concerned.

2. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain the data referred to in paragraph 1 in an electronic and machine-readable format in accordance with the ISO 20022 methodology.

Article 2

Designation to identify natural persons

1. Crypto-asset service provider operating a trading platform for crypto-assets shall identify natural persons in the order book records by using the designation resulting from the concatenation of the ISO 3166-1 alpha-2 (2 letter country code) of the nationality of the person, followed by the national client identifier specified in Table [4] of the Annex based on the nationality of the person (CONCAT).

2. The national client identifier referred to in paragraph 1 shall be assigned in accordance with the priority levels provided in Table [4] of the Annex using the highest priority identifier that a person has regardless of whether that identifier is already known to the crypto-asset service provider operating a trading platform for crypto-assets.

3. Where a natural person is a national of more than one European Economic Area (EEA) country, the country code of the first nationality when sorted alphabetically by its ISO 3166-1 alpha-2 code and the identifier of that nationality assigned in accordance with paragraph 2 shall be used. Where a natural person has a non-EEA nationality, the highest priority identifier in accordance with the field referring to 'all other countries' provided in Table [4] of the Annex shall be used. Where a natural person has EEA and non-EEA nationality, the country code of the EEA nationality and the highest priority identifier of that nationality assigned in accordance with paragraph 2 shall be used.

4. Where the identifier assigned in accordance with paragraph 2 is based on CONCAT, the natural person shall be identified by the crypto-asset service provider operating a trading platform for crypto-assets using the concatenation of the following elements in the following order:

   (a) the date of birth of the person in the format YYYYMMDD;

   (b) the five first characters of the first name;

(c) the five first characters of the surname.

5. For the purposes of paragraph 4, prefixes to names shall be excluded and first names and surnames shorter than five characters shall be appended by '#' so as to ensure that references to names and surnames in accordance with paragraph 4 contain five characters. All characters shall be in upper case. No apostrophes, accents, hyphens, punctuation marks or spaces shall be used.

Article 3

Identification of the parties involved in the order

1. For all orders in crypto-assets advertised through their systems, crypto-asset service providers operating a trading platform for crypto-assets shall maintain designations to identify all of the following:

   (a) participant to the trading platform for crypto-assets who is eligible for the legal entity identifier code and submits the order to the trading platform for crypto-assets, identified as specified in field [1] of Table [2] of the Annex. The recorded legal entity identifier code shall be compliant with the ISO 17442 standard and included in the Global LEI database maintained by the Central Operating Unit appointed by the Regulatory Oversight Committee and pertains to the entity concerned.

   (b) participant to the trading platform for crypto-assets who is not eligible for the legal entity identifier code and submits the order to the trading platform for crypto-assets, identified as specified in field [2] of Table [2] of the Annex

   (c) client on whose behalf the participant to the trading platform for crypto-assets referred to in points (a) or (b) submits the order to the trading platform for crypto-assets, identified as specified in field [3] of Table [2] of the Annex.

   (d) person or the computer algorithm within the participant to the trading platform for crypto-assets referred to in points (a) and (b) to which an order is submitted that is responsible for the investment decision in relation to the order, identified as specified in field [4] of Table [2] of the Annex; where more than one person takes the investment decision, the crypto-asset service provider operating a trading platform for crypto-assets shall keep records of the person taking the primary responsibility for that decision. A crypto-asset service provider operating a trading platform for crypto-assets shall only identify such a person or computer algorithm where that investment decision is made either on behalf of the participant itself, or on behalf of a client in accordance with a discretionary mandate given to it by the client.

   (e) person or the computer algorithm within the participant to the trading platform for crypto-assets referred to in points (a) and (b) that is responsible for the execution of the order, identified as specified in field [5] of Table [2] of the Annex; participant

to the trading platform for crypto-assets who routes the order on behalf of and in the name of another participant to the trading platform for crypto-assets, identified as a non-executing broker as specified in field [6] of Table [2] of the Annex.

2. Where participant to the trading platform for crypto-assets intends to allocate an order to its client following submission of the order to the trading platform for crypto-assets and has not yet allocated the order to its client at the time of the submission of the order, that client of the participant shall be identified as specified in field [3] of Table [2] of the Annex.

3. Where several orders are submitted to the trading platform for crypto-assets together as an aggregated order, the information referred to in field [3] of Table [2] of the Annex shall be recorded in respect of each client.

Article 4

Identification of participants that are legal entities

1. When providing information to competent authorities under Article [3a] crypto-asset service provider operating a trading platform for crypto-assets shall identify participants that are legal entities by using the legal entity identifier provided by that client.

2. Crypto-asset service providers operating a trading platform for crypto-assets shall record the legal entity identifier of its participants eligible for the legal entity identifier and it shall not admit participants to its platform prior to obtaining valid legal entity identifier codes from that participant.

3. The crypto-asset service provider operating a trading platform for crypto-assets shall ensure that the length and construction of the legal entity identifier code are compliant with the ISO 17442 standard and that the code is included in the Global LEI database maintained by the Central Operating Unit appointed by the Regulatory Oversight Committee and pertains to the entity concerned.

Article 5

Trading capacity of participants of the trading platform for crypto-assets

The trading capacity in which the member or participant of the trading platform for crypto-assets submits an order shall be described as specified in field [7] of Table [2] of the Annex.

Article 6

Date and time recording

1. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of the date and time of the occurrence of each event listed in field [21] of Table [2] of the Annex as specified in field [9] of Table [2] of the Annex.

2. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of the date and time for each data element listed in field[s] [49, 50 and 51] of Table [2] of the Annex, as specified in field [9] of Table [2] of the Annex.

Article 7

Validity period and order restrictions

1. Crypto-asset service providers operating a trading platform for crypto-assets shall keep a record of the validity periods and order restrictions that are listed in field[s] [10 and 11] of Table [2] of the Annex.

2. Records of the dates and times in respect of validity periods shall be maintained for each validity period as specified in field [12] of Table [2] of the Annex.

Article 8

Priority and sequence numbers

1. Crypto-asset service providers operating a trading platform for crypto-assets which operate trading systems on a price visibility-time priority shall maintain a record of the priority time stamp for all orders as specified in field [13] of Table [2] of the Annex. The priority time stamp shall be maintained with the same level of accuracy specified by Article [6].

2. Crypto-asset service providers operating a trading platform for crypto-assets which operate trading systems on a size-time priority basis shall maintain a record of the quantities which determine the priority of orders as specified in field [14] of Table [2] of the Annex as well as the priority time stamp referred to in paragraph 1.

3. Crypto-asset service providers operating a trading platform for crypto-assets which use a combination of price-visibility-time priority and size-time priority and display orders on their order book in time priority shall comply with paragraph 1.

4. Crypto-asset service providers operating a trading platform for crypto-assets which use a combination of price-visibility-time priority and size-time priority and display orders on their order book in size-time priority shall comply with paragraph 2.

5. Crypto-asset service providers operating a trading platform for crypto-assets shall assign and maintain a sequence number for each event as specified in field [15] of Table [2] of the Annex.

Article 9

Identification codes for orders in crypto-assets

1. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain an individual identification code for each order as specified in field [20] of Table [2] of the Annex. The identification code shall be unique per order book, per trading day and per crypto-asset. It shall apply from the receipt of the order by the operator of the trading platform for crypto-assets until the removal of the order from the order book. The identification code shall also apply to rejected orders irrespective of the ground for their rejection.

2. The operator of the trading platform for crypto-assets shall maintain the relevant details of strategy orders with implied functionality (SOIF) that are disseminated to the public as specified in the Annex. Field [32] of Table [2] of the Annex shall include a statement that the order is an implicit order.

3. Upon execution of a SOIF, its details shall be maintained by the operator of the trading platform for crypto-assets as specified in the Annex.

4. Upon execution of a SOIF, a strategy linked order identification code shall be indicated using the same identification code for all orders connected to the particular strategy. The strategy linked order identification code shall be as specified in field [46] of Table [2] of the Annex.3. Orders submitted to a trading platform for crypto-assets allowing for a routing strategy shall be identified by that trading platform for crypto-assets as 'routed' as specified in field [33] of Table [2] of the Annex when they are routed to another trading platform for crypto-assets. Orders submitted to a trading platform for crypto-assets allowing for a routing strategy shall retain the same identification code for their lifetime, regardless of whether any remaining quantity is re-posted on the order book of entry.

Article 10

Events affecting the orders in crypto-assets

1. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of the details referred to in field [21] of Table [2] of the Annex in relation to the new orders.

Article 11

Type of order in crypto-assets

1. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of the order type for each order received using their own classification as specified in field [22] of Table [2] of the Annex.

2. Crypto-asset service providers operating a trading platform for crypto-assets shall classify each order received either as a limit order or as a stop order as specified in field [23] of Table [2] of the Annex.

Article 12

Prices relating to orders

Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of all price-related details referred to in Section [I] of Table [2] of the Annex insofar as they pertain to the orders.

Article 13

Order instructions

Crypto-asset service providers operating a trading platform for crypto-assets shall maintain records of all order instructions received for each order as specified in Section [J] of Table [2] of the Annex.

Article 14

Trading platform for crypto-assets transaction identification code

Crypto-asset service providers operating a trading platform for crypto-assets shall maintain an individual transaction identification code for each transaction resulting from the full or partial execution of an order as specified in field [48] of Table [2] of the Annex or field [1] of Table [3].

Article 15

Trading phases and indicative auction price and volume

1. Crypto-asset service providers operating a trading platform for crypto-assets shall maintain a record of the order details as specified in Section [K] of Table [2] of the Annex.

2. Where competent authorities request details referred to in Section [K] pursuant to Article [1], the details referred to in field[s] [9 and 15 to 18] of Table [2] of the Annex shall also be considered as details pertaining to the order concerned by that request.

Article 16

Entry into force and application

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]

ANNEX I

Table 1

Legend for Table 2

SYMBOL	DATA TYPE	DEFINITION
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CFI_CODE}	6 characters	ISO 10962 CFI code.
{COUNTRYCODE_2}	2 alphanumerical characters	2 letter country code, as defined by ISO 3166-1 alpha-2 country code
{CURRENCYCODE_3}	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.dddddZ. 'YYYY' is the year; 'MM' is the month; 'DD' is the day; 'T' – means that the letter 'T' shall be used; 'hh' is the hour; 'mm' is the minute; 'ss.dddddd' is the second and its fraction of a second; Z is UTC time. Dates and times shall be reported in UTC.
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted in the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. decimal separator is '.' (full stop); — negative numbers are prefixed with '-' (minus); — Values are rounded and not truncated.

{DTI}	9 alphanumerical characters	ISO 24165 DTI code assigned to fungible digital assets which uses distributed ledger technology for its issuance, storage, exchange, record of ownership or transaction validation and is not a currency (ISO 4217) as described in ISO 24165 - DTI.
{INTEGER-n}	Integer number of up to n digits in total	Numerical field for both positive and negative integer values.
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{LEI}	20 alphanumerical characters	Legal entity identifier as defined in ISO 17442
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383
{NATIONAL_ID}	35 alphanumerical characters	The identifier is derived in accordance with Article 3 and the Table 4 of the Annex.

Table 2

Details of orders to be kept

Field Number	Field Name	Field description	*Details of the order book*
Section A — Identification of the relevant parties
1	Identification of the entity which submitted the order	The identity of the member or participant of the trading platform operated by the crypto-asset service provider. This field only applies to entities eligible for a legal entity identifier (LEI).	{LEI}
2	Identification of the entity which submitted the order	The identity of the member or participant of the trading platform operated by the crypto-asset service provider. This field applies to entities that are not eligible for an LEI.	{NATIONAL_ID}
3	Client identification code	Code used to identify the client of the member or participant to the trading platform for crypto-assets.	{LEI} {NATIONAL_ID} 'NONE'

			Where the client is a legal entity, the LEI code of the client shall be used.	'PNAL'
			Where the client is not a legal entity, the {NATIONAL_ID} shall be used.	
			In case of pending allocations, the flag PNAL as specified in Article 5(2) of this Regulation shall be used.	
			This field shall be populated with 'NONE' only where the participant of the trading platform for crypto-assets crypto-asset service provider has a direct interest to buy or sell.	
4	Investment decision within the CASP		Code used to identify the person or the algorithm within the crypto-asset service provider who is responsible for the investment decision.	{NATIONAL_ID} — Natural persons
				{ALPHANUM-50} — Algorithms
			Where a natural person within the crypto-asset service provider is responsible for the investment decision the person who is responsible or has primary responsibility for the investment decision shall be identified with the {NATIONAL_ID}	
			Where an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity was responsible for the investment decision the field shall be populated with a code assigned according to Article 2.	
			This field shall be left blank when the investment decision was not made by a person or algorithm within the crypto-asset service provider.	
5	Execution within firm		Code used to identify the person or algorithm within the crypto-asset service provider who is responsible for the execution of the transaction resulting from the order.	{NATIONAL_ID} — Natural persons
				{ALPHANUM-50} — Algorithms

		Where a natural person is responsible for the execution of the transaction, the person shall be identified by {NATIONAL_ID}	
		Where an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity is responsible for the execution of the transaction, this field shall be populated with a code assigned by the crypto-asset service provider, in accordance with Article 3.	
		Where more than one person or a combination of persons and algorithms are involved in the execution of the transaction, the crypto-asset service provider shall determine the trader or algorithm primarily responsible and populate this field with the identity of that trader or algorithm	
6	Non-executing broker	The code used to identify a member or participant of the trading platform for crypto-assets who routed an order on behalf of and in the name of another member or participant of the trading platform for crypto-assets. This field shall be 'NONE' when not relevant.	LEI 'NONE'
Section B — Trading capacity and liquidity provision			
7	Trading capacity	Indicates whether the crypto-asset service provider undertaking the transaction is carrying out matched principal trading, as defined under Article 3(1), point 40 of Regulation (EU) 2023/1114 or exchanging crypto-assets for funds as defined under Article 3(1), point 19 of Regulation (EU) 2023/1114. Where the order submission does not result from the crypto-asset service provider carrying out matched principal trading or exchanging crypto-assets for	'DEAL' — Exchanging crypto-assets for funds 'MTCH' — Matched principal 'AOTC' — Any other capacity

		funds, the field shall indicate that the transaction was carried out under any other capacity.	
		Section C — Date and time	
9	Date and Time	The date and time for each event listed in Sections [G] and [K] of this Table.	{DATE_TIME_FORMAT}
		Section D — Validity period and order restrictions	
10	Validity period	Good-For-Day: the order expires at the end of the trading day on which it was entered in the order book Good-Till-Cancelled: the order will remain active in the order book and be executable until it is actually cancelled. Good-Till-Time: the order expires at the latest at a pre-determined time within the current trading session. Good-Till-Date: the order expires at the end of a specified date. Good-Till-Specified Date and Time: the order expires at a specified date and time. Good After Time: the order is only active after a pre-determined time within the current trading session. Good After Date: the order is only active from the beginning of a pre-determined date Good After Specified Date and Time: the order is only active from a pre-determined time on a pre-determined date. Immediate-Or-Cancel: an order which is executed upon its entering into the order book (for the quantity that can be executed) and which does not remain in the order book for the remaining quantity (if any) that has not been executed. Fill-Or-Kill: an order which is executed upon its entering into the order book provided that it can be	'DAVY' — Good-For-Day 'GTCV' — Good-Till-Cancelled 'GTTV' — Good-Till-Time 'GTDV' — Good-Till-Date 'GTSV' — Good-Till-Specified Date and Time 'GATV' — Good After Time 'GADV' — Good After Date 'GASV' — Good After Specified Date and Time 'IOCV' — Immediate-Or-Cancel 'FOKV' — Fill-Or-Kill or {ALPHANUM-4} characters not already in use for the trading platform for crypto-assets' own classification.

		fully filled: in the event the order can only be partially executed, then it is automatically rejected and cannot therefore be executed.	
		Other: any additional indications that are unique for specific business models, trading platforms or systems.	
11	Order restriction	Good For Closing Price Crossing Session: where an order qualifies for the closing price crossing session. Valid For Auction: the order is only active and can only be executed at auction phases (which can be pre-defined by the crypto-asset service provider client who submitted the order, e.g., opening and/closing auctions and/or intraday auction). Valid For Continuous Trading only: the order is only active during continuous trading. Other: any additional indications that are unique for specific business models, trading platforms or systems.	'SESR' — Good For Closing Price Crossing Session VFAR' — Valid For Auction 'VFCR' — Valid For Continuous Trading only {ALPHANUM-4} characters not already in use for the trading platform for crypto-assets' own classification. This field shall be populated with multiple flags separated by a comma where more than one flag is applicable
12	Validity period and time	This field refers to the time stamp reflecting the time on which the order becomes active, or it is ultimately removed from the order book: Good for day: the date of entry with the timestamp immediately prior to midnight Good till time: the date of entry and the time to that specified in the order Good till date: will be the specified date of expiry with the timestamp immediately prior to midnight Good till specified date and time: the specified date and time of expiry	{DATE_TIME_FORMAT}

		Good after time: the date of entry and the specified time at which the order becomes active	
		Good after date: the specified date with the timestamp immediately after midnight	
		Good after specified date and time: the specified date and time at which the order becomes active	
		Good till Cancel: the ultimate date and time the order is automatically removed by market operations	
		Other: timestamp for any additional validity type.	
Section E — Priority and sequence number			
13	Priority time stamp	This field shall be updated every time the priority of an order changes.	{DATE_TIME_FORMAT}
14	Priority size	For trading platforms for crypto-assets which use size-time priority, this field shall be populated with a positive number corresponding to the quantity. This field shall be updated every time the priority of the order changes.	Up to 20 numeric positive digits.
15	Sequence number	Each event listed in section G shall be identified using positive integers in ascending order. The sequence number shall be unique to each type of event; consistent across all events, timestamped by the operator of the trading platform for crypto-assets; be persistent for the date that the event occurs.	{INTEGER-50}
Section F — Identification of the order			
16	Segment MIC code	Identification of the trading platform for crypto-asset where the order was submitted. If the trading platform for crypto-asset uses segment MICs, then the segment MIC shall be used.	{MIC}

		If the trading platform for crypto-asset does not use segment MICs, then the operating MIC shall be used	
17	Order book code	The alphanumerical code established by the trading platform for crypto-assets for each order book. An order book shall be understood as an organised list of buy and sell orders for a specific crypto-asset.	{ALPHANUM-20}
18	Crypto-asset identification code	Unique and unambiguous identifier of the crypto-asset	{DTI}
19	Date of receipt	Date of receipt of the original order	{DATEFORMAT}
20	Order identification code	An alphanumerical code assigned by the operator of the trading platform for crypto-assets to the individual order.	{ALPHANUM-50}
Section G — Events affecting the order			
21	New order, order modification, order cancellation, order rejections, partial or full execution	New order: submission of a new order to the crypto-asset service provider operating the trading platform for crypto-assets Triggered: an order which becomes executable or, as the case may be, non-executable upon the realisation of a pre-determined condition. Replaced by the member or participant of the trading platform for crypto-assets: where a member, participant or client of the trading platform for crypto-assets decides upon its own initiative to change any characteristic of the order it has previously entered into the order book. Replaced by market operations (automatic): where any characteristic of an order is changed by the trading platform for crypto-assets operator's ICT systems. This includes where a	'NEWO' — New order 'TRIG' — Triggered 'REME' — Replaced by the member or participant of the trading platform for crypto-assets 'REMA' — Replaced by market operations (automatic) 'REMH' — Replaced by market operations (human intervention) 'CHME' — Change of status at the initiative of the member/participant of the trading platform for crypto-assets 'CHMO' — Change of status due to market operations 'CAME' — Cancelled at the initiative of the member or

		peg order's or a trailing stop order's current characteristics are changed to reflect how the order is located within the order book.	participant of the trading platform for crypto-assets
			'CAMO' -Cancelled by market operations
		Replaced by market operations (human intervention): where any characteristic of an order is changed by a trading platform for crypto-assets operator's staff. This includes the situation where a member or participant of the trading platform for crypto-assets requests to urgently cancel the orders linked to ICT incidents.	'REMO' — Rejected order
			'EXPI' — Expired order
			'PARF' — Partially filled
			'FILL' — Filled
			{ALPHANUM-4}
			characters not already in use for the trading platform for crypto-assets' own classification.
		Change of status at the initiative of the member, participant of the trading platform for crypto-assets. This includes activation and deactivation.	
		Change of status due to market operations.	
		Cancelled at the initiative of the member, participant of the trading platform for crypto-assets; where a member, participant or client decides upon its own initiative to cancel the order it has previously entered.	
		Cancelled by market operations.	
		Rejected order: an order received but rejected by the operator of the trading platform for crypto-assets.	
		Expired order: where the order is removed from the order book upon the end of its validity period.	
		Partially filled: where the order is not fully executed so that there remains a quantity to be executed.	
		Filled: where there is no more quantity to be executed.	
Section H — Type of order			
22	Order type	Identifies the type of order submitted to the trading platform for crypto-assets as per the trading platform for crypto-assets' specifications.	{ALPHANUM-50}

23	Order type classification	Classification of the order according to two generic order types. LIMIT order: in the cases where the order is tradable and STOP order: in the cases where the order becomes tradable only upon the realisation of a pre-determined price event.	The letters 'LMTO' for limit or the letters 'STOP' for stop.
Section I — Prices			
24	Limit price	The maximum price at which a buy order can trade or the minimum price at which a sell order can trade. The spread price for a strategy order. It can be negative or positive. This field shall be 'NONE' when not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/13} in case the price is expressed as monetary value. {DECIMAL-11/10} in case the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points 'NONE'
25	Additional limit Price	Any other limit price which may apply to the order. This field shall be 'NONE' if not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10 where the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points 'NONE'

		currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	
26	Stop price	The price that must be reached for the order to become active. For stop orders triggered by events independent of the price of the crypto-asset, this field shall be populated with a stop price equal to zero. This field shall be 'NONE' if not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10} where the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points
27	Pegged limit price	The maximum price at which a pegged order to buy can trade or the minimum price at which a pegged order to sell can trade. This field shall be 'NONE' if not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit.	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10} where the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points 'NONE'

			If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	
28	Transaction price	Traded price of the transaction excluding, where applicable, commission, other fees and accrued interest. Where price is not applicable the field shall be populated with the value 'NOAP'. Where price recorded in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall be populated with the value 'NOAP'. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency.	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10} where the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points "NOAP"
29	Price currency	Currency in which the trading price for the crypto-asset related to the order is expressed (applicable where the price is expressed as monetary value). Where the crypto-asset is traded in electronic money/e-money token, the Digital Token Identifier code shall be used. Where price of the crypto-asset is expressed in monetary terms and	{CURRENCYCODE_3} {DTI} {CURRENCYCODE_3} should be used for fiat currencies in a currency pair {DTI_SHORT_NAME} should be used for crypto assets in a currency pair "NOAP"

			it is expressed in a currency pair, the currency pair in which the price for the crypto-asset related to the order is expressed shall be reported. The first currency code shall be that of the base currency and the second currency code shall be that of the quote currency. The quote currency determines the price of one unit of the base currency. The ISO currency code and the DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI shall be used to represent the fiat currency and the crypto asset respectively in the currency pair.	
30	Price notation	Indicates whether the price is expressed in monetary value, in percentage, in yield, in basis points or in crypto-assets.	'MONE' — Monetary value 'PERC' — Percentage 'YIEL' — Yield 'BAPO' — Basis points
Section J — Order instructions				
31	Buy-sell indicator	To show if the order is to buy or sell.	'BUYI' — buy 'SELL' — sell
32	Order status	To identify orders that are active/inactive/suspended, firm/indicative (assigned to quotes only)/implicit/rerouted. Active — non-quote orders that are tradable. Inactive — non-quote orders that are not tradable. Firm/Indicative — Assigned to quotes only. Indicative quotes mean that they are visible but cannot be executed. This includes warrants in some trading platform for crypto-assets. Firm quotes can be executed. Implicit — Used for strategy orders that are derived from implied in or implied out functionality.	'ACTI'- active or 'INAC'- inactive or 'FIRM'- firm quotes or 'INDI'- indicative quotes or 'IMPL'- implied strategy orders or 'ROUT'- routed orders. If multiple statuses are applicable, this field shall

		Routed — Used for orders that are routed by the trading platform for crypto-assets to other venues.	be populated with multiple flags separated by comma
33	Quantity notation	Indicates whether the quantity reported is expressed in number of units, as a nominal value or as a monetary value, or crypto-asset units.	'UNIT' — Number of units 'NOML' — Nominal value 'MONE' — Monetary value '{CRYP}' — Value in crypto-assets
34	Quantity currency	Currency in which the quantity is expressed. The currency shall refer to the crypto-asset units, even when the transaction is denominated in sub-components of that crypto-asset. Field only needs to be populated where the quantity is expressed as a nominal monetary value or crypto-asset units.	{CURRENCYCODE_3} {DTI}
35	Initial quantity	The number of units of the crypto-asset in the order. In case the order pertains a fraction of a crypto-asset, indicate the quantity in decimal notation of the unit. The nominal or monetary value of the crypto-asset.	{DECIMAL-18/17} in case the quantity is expressed as number of units {DECIMAL-18/5} in case the quantity is expressed as monetary or nominal value
36	Remaining quantity	The total quantity that remains in the order book after a partial execution or in the case of any other event affecting the order. On a partial fill order event, this shall be the total remaining volume after that partial execution. On an order entry this shall equal the initial quantity.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value
37	Displayed quantity	The quantity that is visible (as opposed to hidden) in the order	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value

38	Traded quantity	Where there is a partial or full execution, this field shall be populated with the executed quantity	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value
39	Minimum Acceptable Quantity (MAQ)	The minimum acceptable quantity for an order to be filled which can consist of multiple partial executions and is normally only for non-persistent order types. This field shall be 'NONE 'if not relevant.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value 'NONE'
40	Minimum executable size (MES)	The minimum execution size of any individual potential execution. This field shall be left blank if not relevant.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value
41	MES first execution only	Specifies whether the MES is relevant only for the first execution. This field can be left blank where field [41] is left blank.	'true' 'false'
42	Passive only indicator	Indicates if the order is submitted to the trading platform for crypto-asset with a characteristic/flag, such that the order shall not immediately execute against any contra visible orders.	'true' 'false'
43	Passive or aggressive indicator	On partial fill and fill order events, indicates whether the order was already resting on the order book and providing liquidity (passive) or the order initiated the trade and thus took liquidity (aggressive).	'PASV' — passive or 'AGRE' — aggressive.

			This field shall be left blank if not relevant	
44	Self-Execution Prevention	Indicates if the order has been entered with self-execution prevention criteria, so that it would not execute with an order on the opposite side of the book entered by the same member or participant.	'true' 'false'	
45	Strategy Linked Order identification	The alphanumerical code used to link all connected orders that are part of a strategy pursuant to Article 7(2).	{ALPHANUM-50}	
46	Routing Strategy	The applicable routing strategy as per the trading platform for crypto-assets' specification. This field shall be left blank if not relevant.	{ALPHANUM-50}	
47	Trading platform for crypto-assets transaction identification code	Alphanumerical code assigned by the trading platform for crypto-asset to the transaction pursuant to Article 16. The code shall be unique, consistent, and persistent per ISO10383 segment MIC and per trading day. The components of the transaction identification code shall not disclose the identity of the counterparties to the transaction for which the code is maintained. For orders transmitted to trading platforms for crypto-assets as referred to in Article [7], point (3)(a), to an entity providing crypto-asset services outside of the Union, this information shall be recorded where available.	{ALPHANUM-52}	
Section K — Trading phases, indicative auction price and volume				
48	Trading phases	The name of each of the different trading phases during which an order is present in the order book including trading halts, circuit breakers and suspensions.	{ALPHANUM-50}	
49	Indicative auction price	The price at which each auction is due to uncross in respect to the	{DECIMAL-18/5} in case the price is expressed as	

		crypto-asset for which one or more orders have been placed.	monetary or nominal value. Where price reported in monetary terms, it shall be provided in the major currency unit. DECIMAL-11/10} in case the price is expressed as a percentage or yield
50	Indicative auction volume	The volume (number of units of the crypto-asset) that can be executed at the indicative auction price in field 50 if the auction ended at that precise moment of time.	{DECIMAL-18/17} in case the quantity is expressed as number of units {DECIMAL-18/5} in case the quantity is expressed as monetary or nominal value

Table 3

On-chain data

Field no	FIELD	CONTENT TO BE RECORDED	*Details to be provided to the competent authority*
1	Transaction hash	Identifier enabling the unique identification of a specific transaction occurring on the network.	ALPHANUM-140}
2	Wallet addresses	Code uniquely identifying the wallet, belonging to the buyer/seller, to which the crypto-asset is transferred.	{ALPHANUM-52}
3	Smart Contract Addresses	Code uniquely identifying the smart contract address.	{ALPHANUM-52}
4	Timestamp	Timestamp of the creation of the block.	{DATE_TIME_FORMAT}
5	Quantity/ Current Total Supply	Ratio between the transferred quantity and the current floating amount of the asset.	
6	Token ID	Digital Token Identifier	{DTI}

7	Gas fee	Fees which are requested to cover the costs for the creation of a new block.	
8	GasLimit	This is the maximum amount of "gas" that an on-chain user is willing to pay for the executions of a specific transaction.	
9	*DataSize*	This field is connected to the above. An on-chain transaction can contain "attachments" in a specific *data* field that affect the "gas" required to process the transaction.	
10	*"To"*	The unique identifier for buyer usually generated by the DLT protocol on the basis of the buyer wallet addresses.	{ALPHANUM-50}
11	*"from"*	The unique identifier for seller usually generated by the DLT protocol on the basis of the seller wallet addresses.	{ALPHANUM-52}
12	Currency	Currency code	{CURRENCYCODE_3} {DTI}
13	Transaction Record Number	Identification number reported in Field 2 of Section 3 that is unique to the executing firm for each record to ensure that a link can be made between the on-chain report and the off-chain one.	{ALPHANUM-52}

Table 4

List of natural person national identifiers to be used for the purposed of Article 2

ISO 3166 — 1 alpha 2	Country Name	1st priority identifier	2nd priority identifier	3rd priority identifier
AT	Austria	CONCAT		
BE	Belgium	Belgian National Number (Numéro de registre national — Rijksregis- ternummer)	CONCAT	
BG	Bulgaria	Bulgarian Personal Number	CONCAT	
CY	Cyprus	National Passport Number	CONCAT	
CZ	Czech Republic	National identification number (Rodné číslo)	Passport Number	CONCAT

DE	Germany	CONCAT		
DK	Denmark	Personal identity code 10 digits alphanumerical: DDMMYYXXXX	CONCAT	
EE	Estonia	Estonian Personal Identification Code (Isikukood)		
ES	Spain	Tax identification number (Código de identificación fiscal)		
FI	Finland	Personal identity code	CONCAT	
FR	France	CONCAT		
GB	United Kingdom	UK National Insurance number	CONCAT	
GR	Greece	10 DSS digit investor share	CONCAT	
HR	Croatia	Personal Identification Number (OIB — Osobni identifikacijski broj)	CONCAT	
HU	Hungary	CONCAT		
IE	Ireland	CONCAT		
IS	Iceland	Personal Identity Code (Kennitala)		
IT	Italy	Fiscal code (Codice fiscale)		
LI	Liechtenstein	National Passport Number	National Identity Card Number	CONCAT
LT	Lithuania	Personal code (Asmens kodas)	National Passport Number	CONCAT
LU	Luxembourg	CONCAT		
LV	Latvia	Personal code (Personas kods)	CONCAT	
MT	Malta	National Identification Number	National Passport Number	
NL	Netherlands	National Passport Number	National identity card number	CONCAT

NO	Norway	11-digit personal id (Foedselsnummer)	CONCAT	
PL	Poland	National Identification Number (PESEL)	Tax Number (Numer identyfikacji podatko- wej)	
PT	Portugal	Tax number (Número de Identificação Fiscal)	National Passport Number	CONCAT
RO	Romania	National Identification Number (Cod Numeric Personal)	National Passport Number	CONCAT
SE	Sweden	Personal identity number	CONCAT	
SI	Slovenia	Personal Identification Number (EMŠO: Enotna Matična Številka Občana)	CONCAT	
SK	Slovakia	Personal number (Rodné číslo)	National Passport Number	CONCAT
All other countries	National Passport Number	CONCAT		

9.2.6 RTS on record-keeping by crypto-asset service providers

COMMISSION DELEGATED REGULATION (EU) 2024/…

of XXX

supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying records to be kept of all crypto-asset services, activities, orders and transactions undertaken

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[79], and in particular Article 68(10), first subparagraph, point (b) thereof,

Whereas:

1.   The records a crypto-asset service provider is required to keep should be adapted to the type of business and the range of crypto-asset services, activities, orders, and transactions undertaken by them, provided that the record-keeping obligations set out in Regulation (EU) 2023/1114, Regulation (EU) [MiCA RTS on complaints handling], Regulation (EU) [MiCA RTS on conflicts of interest], Regulation (EU) 2023/1113 and this Regulation are fulfilled and that competent authorities are able to fulfil their supervisory tasks and take enforcement measures in view of ensuring both investor protection and market integrity.

2.   Crypto-asset service providers should be free to determine the manner in which they keep records of relevant data relating to all orders and transactions in crypto-assets. However, consistent and comparable records on orders and transactions are essential for competent authorities to fulfil their supervisory tasks and to take enforcement measures. In particular, competent authorities should be able to seamlessly perform the same analysis on all record datasets, regardless of which crypto-asset service provider produced the record. Crypto-asset service providers should therefore provide consistent details of the records on orders and transactions by using uniform standards where a competent authority requests such information pursuant to Article 94 of Regulation (EU) 2023/1114.

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[79]   OJ L 150, 9.6.2023, p. 40.

3. Abusive behaviours, including market manipulation, may be carried through several techniques, including algorithmic trading. Therefore, in order to ensure effective market surveillance, where investment decisions are made by a person other than the client or by a computer algorithm, the person or algorithm should be identified in the order and transaction records using unique, robust and consistent identifiers. Where more than one person in a crypto-asset service provider makes the investment decision, the person taking the primary responsibility for the decision should be identified in the record.

4. In order to ensure consistent and robust identification of natural persons referred to in order and transaction records, they should be identified by a concatenation of the country of their nationality followed by identifiers assigned by the country of nationality of those persons. Where those identifiers are not available, natural persons should be identified by identifiers created from a concatenation of their date of birth and name.

5. In order to facilitate market surveillance, client identification should be consistent, unique across different CASPs and in accordance with internationally established principles. Order and transaction records should therefore include the full name and date of birth of clients that are natural persons and should identify clients that are legal entities by their legal entity identifiers (LEI). In line with the approach under Article 26 of Regulation (EU) No 600/2014, setting forth the obligation for investment firms to report transactions in financial instruments, crypto-asset service provider should obtain LEIs from their clients before undertaking services which would trigger record keeping obligations.

6. Manual or algorithmic abusive behaviours can occur also when determining the trading platform for crypto-asset to access or the crypto-asset service provider to which the orders are to be transmitted or any other conditions related to the execution of the order. Therefore, in order to ensure effective market surveillance, a person or computer algorithm within the crypto-asset service provider that performing such activities should be identified in the order and transaction records.

7. The details relating to the order to be transmitted between crypto asset service providers should be specified in order to ensure that the competent authorities have access to information that is relevant, accurate and complete.

8. In order to avoid data gaps where a crypto-asset service provider transmits orders or executes transactions via an entity that is not subject to Regulation (EU) 2023/1114, the records maintained by the crypto-asset service provider should cover the transmission or the execution, as if it was undertaken directly by the crypto-asset service provider.

9. To properly monitor the integrity and stability of the markets in crypto-assets, competent authorities need reliable information on the crypto-assets that are traded. Such information should allow them to both identify the individual crypto-asset being traded and classify it according to internationnally established principles. In addition, should bbe able to retrieve the main caracteristics of the crypto-assets, including their technology-specific features. Crypto-asset service providers should therefore use an internationally agreed digital token identifier (DTI) to identify crypto-assets in the order and transactions records that they provide to competent authorities. In addition to DTI, the ISO code for

the classification of financial instruments (CFI) is currently being revised to accommodate for the classification of crypto-assets. Until the time such revision is finalised and the new CFI standard becomes available, an interim taxonomy indicating the type of crypto-assets as prescribed in this Regulation should be used.

10. In order to ensure efficient and effective market monitoring, transaction records should reflect whether the transaction was executed wholly or partly through a branch of the crypto-asset service provider located in another Member State. The inclusion of granular data on branch activity in the records kept by the crypto-asset service providers would allow competent authorities of the host Member State to supervise the services provided by branches within their territory.

11. This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority.

12. The European Securities and Markets 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[80].

HAS ADOPTED THIS REGULATION:

Section 1

Retention of records and general provision on records

Article 1

Definitions

For the purposes of this Regulation, the following definitions apply:

(a) "undertaking a transaction" means executing a transaction or transmitting an order;

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[80] 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).

(b) "transaction" means the conclusion of an acquisition or disposal of a crypto-asset other than those crypto-assets referred to in Article 2(3) and (4) of Regulation (EU) 2023/1114;

(c) "executing a transaction" means providing any of the following services or performing any of the following activities that result in a transaction:

(i) reception and transmission of orders in relation to one or more crypto-asset;

(ii) execution of orders on behalf of clients;

(iii) exchange of crypto-assets for funds or for other crypto-assets;

(iv) making an investment decision in accordance with a discretionary mandate given by a client;

(v) transfer of crypto-assets to or from accounts.

Article 2

Retention of records

1. The records shall be retained in a medium that allows the storage of information in a way accessible for future reference by the competent authority, and in such a form and manner that the following conditions are met:

    (a) the competent authority is able to access them without undue delay and to reconstitute each key stage of the processing of each service, activity, order or transaction;

    (b) it is possible for any corrections or other amendments, and the contents of the records prior to such corrections or amendments, to be easily ascertained;

    (c) it is not possible for the records otherwise to be manipulated or altered;

    (d) it allows ICT or any other efficient exploitation when the analysis of the data cannot be easily carried out due to the volume and the nature of the data; and(e)   the firm's arrangements comply with the record keeping requirements irrespective of the technology used.

2. Crypto-assets service providers shall keep the records identified in the Annex, depending upon the nature of their services and activities.

    The list of records identified in the Annex is without prejudice to any other record-keeping obligations arising from other legislation.

Section 2

Record keeping relating to specific crypto-asset services and to activities of crypto-asset service providers

Article 3

Record keeping of policies and procedures of the crypto-asset service provider

1. Crypto-asset service providers shall keep records (a copy) of any policies and procedures they are required to maintain pursuant to Regulation (EU) No 2023/1114 and their implementing measures in writing.

2. Crypto-asset service providers shall also keep an audit trail of the assessment and periodical review by the management body of the crypto-asset service provider of the policy arrangements and policies and procedures put in place to comply with Chapters 2 and 3 of Title V of Regulation (EU) 2023/1114, including of any deficiencies identified in relation to such policy arrangements, policies and procedures and of any measures taken to address them.

Article 4

Record keeping of rights and obligations of the crypto-asset service provider and the client

Documents setting out the respective rights and obligations of the crypto-asset service provider and the client under an agreement to provide services, or the terms on which the crypto-asset service provider provides services to the client, shall be kept for a period of five years and, where requested by the competent authority before five years have elapsed, for a period of up to seven years, from the date on which the agreement for the provision of services is terminated.

Article 5

Record keeping in relation to the safekeeping of clients' crypto-assets and funds

1. Crypto-asset service providers shall keep records enabling them at any time and without delay to distinguish crypto-assets and funds held for one client from crypto-assets and funds held for any other client and from their own assets.

   Crypto-asset service providers shall maintain their records in a way that ensures that they may be used as an audit trail.

2. Such records shall include the following:

   (a) records that readily identify the balances of crypto-assets and funds held for each client;

   (b) where client funds are held by crypto-asset service providers in accordance with Article 70(2) of Regulation (EU) 2023/1114, details of the accounts in which client funds are held and on the relevant agreements with those credit institutions or central banks;

   (c) details of the accounts opened with third parties holding crypto-assets for the crypto-assets service provider and of the outsourcing agreements with those third parties;

   (d) details of third parties carrying out any tasks outsourced in accordance with Article 73 of Regulation (EU) 2023/1114 and details of the outsourced tasks;

   (e) names and function of the staff of the crypto-asset service provider involved in the safekeeping of clients' crypto-assets and funds, including the staff responsible for the crypto-asset service provider's compliance with the requirements in relation to the safekeeping of clients' crypto-assets and funds;

   (f) agreements relevant to establish client ownership over crypto-assets and funds.

Section 3

Record keeping of orders and transactions

Article 6

Record keeping of orders

1. Crypto-assets service providers shall, in relation to every initial order received from a client and in relation to every initial decision to deal taken, to the extent they are applicable to the order or decision to deal in question, record and keep at the disposal of the competent authority the details set out in the second and third columns of Table 2 in Annex II and, where applicable, in Table 5 in Annex II.

2. Where competent authorities request any of the details referred to in paragraph 1 in accordance with Article 94(1), points (a) or (d), and Article 94(3), point (a), of Regulation (EU) 2023/1114, the crypto-assets service providers shall provide such details as set out in the fourth columns of Table 2 of Annex II.

3. Where the details set out in Table 2 of Annex II are also prescribed under Article 76 of Regulation (EU) 2023/1114, they shall be maintained in a consistent way and according to the same standards prescribed under Article 76 of Regulation (EU) 2023/1114.

Article 7

Record keeping of transactions

1. Crypto-assets service providers shall, immediately after undertaking a transaction, record and keep at the disposal of the competent authority the details set out in the second and third columns of the Table 4 of Annex II and, where applicable, in Table 5 in Annex II.

2. Where competent authorities request any of the details referred to in paragraph 1 in accordance with Article 94(1), points (a) or (d), and Article 94(3), point (a), of Regulation (EU) 2023/1114, the operators of trading platforms for crypto-assets shall provide such details as set out in the fourth column of Table 4 of Annex II.

Article 8

Identification of person or computer algorithm within the crypto-asset service provider making the investment decision

1. Where a person or computer algorithm within a crypto-asset service provider makes the investment decision to acquire or dispose of a specific crypto-asset on its own behalf or on behalf of a client in accordance with a discretionary mandate given by the client, that person or computer algorithm shall be identified and recorded as specified in Field 40 of Table 4 in Annex II.

2. Where more than one person within the crypto-asset service provider takes the investment decision, the crypto-asset service provider shall keep records of the person taking the primary responsibility for that decision.

Article 9

Designation to identify natural persons

1. A client that is a natural person shall be identified in the crypto-asset service provider records using the designation resulting from the concatenation of the ISO 3166-1 alpha-2 (2 letter country code) of the nationality of the person, followed by the national client identifier specified in Table 3 in Annex II, based on the nationality of the person (CONCAT).

2. The national client identifier referred to in paragraph 1 shall be assigned in accordance with the priority levels provided in Table 3 in Annex II using the highest priority identifier that a person has regardless of whether that identifier is already known to the crypto-asset service provider.

3. Where a natural person is a national of more than one European Economic Area (EEA) country, the country code of the first nationality when sorted alphabetically by its ISO 3166-1 alpha-2 code and the identifier of that nationality assigned in accordance with paragraph 2 shall be used. Where a natural person has a non-EEA nationality, the highest priority identifier in accordance with the field referring to 'all other countries' provided in Table 3 in Annex II shall be used. Where a natural person has EEA and non-EEA nationality, the country code of the EEA nationality and the highest priority identifier of that nationality assigned in accordance with paragraph 2 shall be used.

4. Where the identifier assigned in accordance with paragraph 2 is based on CONCAT, the natural person shall be identified by the crypto-asset service provider using the concatenation of the following elements in the following order:

   (a)   the date of birth of the person in the format YYYYMMDD;

   (b)   the five first characters of the first name;

   (c)   the five first characters of the surname.

5. For the purposes of paragraph 4, prefixes to names shall be excluded and first names and surnames shorter than five characters shall be appended by '#' so as to ensure that references to names and surnames in accordance with paragraph 4 contain five characters. All characters shall be in upper case. No apostrophes, accents, hyphens, punctuation marks or spaces shall be used.

Article 10

Identification of person or computer algorithm determining conditions for the execution of a transaction

1. Where a person or computer algorithm within the crypto-asset service provider which executes a transaction determines which trading platform for crypto-asset located outside the Union to access, which other crypto-asset service provider to transmit orders to or any conditions related to the execution of a transaction, that person or computer algorithm shall be identified in Field 40 of Table 4 of the Annex II.

2. Where a person within the crypto-asset service provider takes decisions determining the execution of the transaction, the crypto-asset service provider shall assign a designation for identifying that person in its transaction records in accordance with Article 9.

3. Where a computer algorithm within the crypto-asset service provider takes decisions determining the execution of the transaction, that computer algorithm shall be identified in Field 42 of Table 4 in Annex II.

4. Where a person and computer algorithm are both involved in execution of the transaction, or more than one person or algorithm are involved, the crypto-asset service provider shall

record which person or computer algorithm is primarily responsible for the execution of the transaction.

Article 11

Reception and transmission of an order

1. Crypto-asset service providers receiving and transmitting an order to another crypto-asset service provider, where such transmission does not qualify as execution of a transaction within the meaning of Article 1(3), point a), shall record the order details as described in Fields 1, 2, 10, 12, 14, 15, 16, 17, 19, 20, 21, 25, 37 of Table 2 of Annex II, insofar as pertinent to a given order.

2. Where the order transmitted was received from a prior transmitting crypto-asset service provider, the code provided pursuant to the first subparagraph shall be the code identifying the prior transmitting crypto-asset service provider.

3. Where the order is transmitted more than one time, the order details referred to in paragraph 1, first subparagraph, points (d) to (i) shall be recorded in respect of the client of the first transmitting crypto-asset service provider.

4. Where orders are aggregated for more than one client, information referred to in paragraph 1 shall be recorded for each client.

Article 12

Recording of orders and transactions executed via entities not subject to Regulation (EU) 2023/1114

1. Where a crypto-asset service provider provides the service of execution of orders through a trading platform for crypto-assets or a service provider that is not subject to Regulation (EU) 2023/114, the crypto-asset service provider shall record the details of the order as if the execution was undertaken by the crypto-asset service provider.

2. The crypto-asset service provider shall record the details set out in Tables 2 and 4 of the Annex to the extent they are applicable to the order or transaction in question.

Article 13

Recording of reception and transmission of orders to entities not subject to Regulation (EU) 2023/1114

1. Where a crypto-asset service provider transmits an order to a firm that is not subject to Regulation (EU) 2023/1114, the crypto-asset service provider shall record the details of the transmitted order as set out in Table 2 of Annex II insofar as pertinent to the order.

2. Where the order is aggregated for several clients, the information referred to in Article 9 and 14, as applicable, shall be recorded for each client.

Article 14

Identification of clients that are legal entities

1. When providing information to competent authorities as referred to in Articles 6 and 7, a crypto-asset service provider shall identify clients that are legal entities by using the legal entity identifier provided by that client.

2. A crypto-asset service provider shall not undertake services, activities, orders or transactions triggering the obligation to keep records on behalf of a client who is eligible for the legal entity identifier code, prior to obtaining the legal entity identifier code from that client.

3. The crypto-asset service provider shall record legal entity identifier codes compliant with the ISO 17442 standard, and included in the Global LEI database maintained by the Central Operating Unit appointed by the Regulatory Oversight Committee and pertain to the entity concerned.

Article 15

Identification of crypto assets

When providing information to competent authorities under Articles 6 and 7, a crypto-asset service provider shall identify the crypto-assets that are object of the recorded order or transaction, or used as a means of payment, by using a digital token identifier that is compliant with the ISO 24165 standard.

Article 16

Recording of transactions undertaken by branches

1. Where a crypto-asset service provider undertakes a transaction wholly or partly through its branch, it shall include in its transaction records the ISO 3166 country code of such branch, in accordance with Fields 7, 16, 34, 41 or 43 of Table 4 of Annex II.

2. Where relevant, the crypto-asset service provider shall include in the record the indication of the following information:

(a) whether the branch received the order from a client or made an investment decision for a client in accordance with a discretionary mandate given to it by the client;

(b) whether the branch has supervisory responsibility for the person taking the investment decision concerned;

(c) whether the branch has supervisory responsibility for the person determining the conditions for execution of the transaction;

(d) whether the transaction was undertaken on a trading platform for crypto-asset located outside the Union using the branch's membership of that trading platform for crypto-asset.

Article 17

Identification of the crypto-asset service provider undertaking orders and transactions

1. A crypto-asset service provider which undertakes orders or transactions triggering the obligation to keep records shall ensure that it is identified in the records to be maintained pursuant to this regulation with a legal entity identifier compliant with the ISO 17442 standard and included in the Global LEI database maintained by the Central Operating Unit appointed by the Regulatory Oversight Committee and pertain to the entity concerned.

2. The crypto-asset service provider shall ensure that the reference data related to its legal entity identifier is renewed in accordance with the terms of any of the accredited Local Operating Units of the Global Legal Entity Identifier System.

Article 18

Entry into force and application

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]

ANNEX I

Records of services and activities: list of records to be kept by crypto-asset service providers depending upon the nature of their services and activities

Type of record	Summary of content
Communication with clients	
Marketing communications	Each marketing communication issued by the crypto-asset service provider (except in oral form) or on its behalf.
Information to clients	Information other than marketing communication provided by the crypto-asset service provider, or on its behalf, to the client with regard to the crypto-asset service provider, its services and activities, crypto-assets as well as the applicable costs and related charges.
Records of communication with clients	Records of telephone conversations or electronic communications relating to transactions or to the reception, transmission and execution of client orders, including where such conversations or communications do not result in the conclusion of a transaction or in the provision of the services of reception and transmission of orders or execution of order.
Rights and obligations of the crypto-asset service provider and the client	

Client agreements	The document or documents agreed between the crypto-asset service provider and the client that set out the rights and obligations of the parties.
Consent of the client	Any communication between the crypto-asset service provider and the client or any document evidencing that the client consented to the provision of services and to the terms on which the crypto-asset service provider will provide such services to the client.
Market abuse	
Market abuse	Records of instances where circumstances indicate that market abuse has been committed, is being committed or is likely to be committed. Such records shall include, at least, the identification of the relevant persons or computer algorithms.
Safekeeping of clients' crypto-assets and funds	
Clients' crypto-assets and means of access to crypto-assets held by the crypto-asset service provider	The records enabling the crypto-asset service provider to safeguard the ownership rights of clients and to prevent the use of clients' crypto-assets for their own account, in accordance with Article 70(1) of Regulation (EU) No 2023/1114.
Clients' funds held by a crypto-asset service provider	The records enabling the crypto-asset service provider to safeguard the ownership rights of clients and to prevent the use of clients' funds for their own account in accordance with Article 70(2) of Regulation (EU) No 2023/1114.

	Any document, records or evidence showing that the crypto-asset service provider complies with its obligations under Article 70(3) of Regulation (EU) No 2023/1114.
Complaints handling	
Complaints	The records as provided in Article 8(2) of Commission Delegated Regulation (EU) [RTS on complaints handling].
Conflicts of interest and personal transactions	
Conflicts of interest	The records as provided in Article 8(4) of Commission Delegated Regulation (EU) [RTS on conflicts of interest].
Personal transaction	The records as provided in Article 7(3)(c) and (4) of Commission Delegated Regulation (EU) [RTS on conflicts of interest].
Outsourcing	
Outsourcing agreements	Records of the written agreements as provided in Article 73(3) of Regulation (EU) 2023/1114.
Outsourced services and activities	Records of any service or activity outsourced to a third party together with, at least: (a) the name, registered office, operating address and regulatory status of the third party to which the service or activity, or any part of the service or activity, was outsourced;

	(b) the name, function and contact details of the person in charge of the service or activity, or part of the service or activity, at the third party to which the service or activity, or any part of the service or activity, was outsourced;
	(c) the name and function of the person in charge of the service or activity, or part of the service or activity, at the crypto-asset service provider.
Custody and administration of crypto-assets on behalf of clients	
Register of positions	Records of the registers of positions as provided in Article 75(2) and (4) of Regulation (EU) 2023/1114.
Statement of positions	Records of the statement of positions, as provided in Article 75(5) of Regulation 2023/1114.
Communications with clients	Records of any communication with the client as provided in Article 75(5), second subparagraph, of Regulation 2023/1114 including the response received by the client or lack thereof.
Use of other crypto-asset service providers	Where clients' crypto-assets or means of access to crypto-assets are safekept or controlled in accordance with Article 75(9) of Regulation (EU) 2023/1114:
	a) records from the third party crypto-asset service provider evidencing the positions of the clients;
	b) records of communications evidencing that the crypto-asset service provider complied with Article 75(9), second subparagraph of Regulation (EU) 2023/1114.
Operation of a trading platform for crypto-assets	

Operating rules	A copy of the operating rules provided in Article 76(1) of Regulation (EU) 2023/1114, including deficiencies detected and the measures taken to remedy them.
Assessment of suitability of the crypto-asset	Records of the assessment conducted pursuant to Article 76(2) of Regulation (EU) 2323/1114 and its outcome.
In-built anonymisation function	Records of cases where crypto-assets have an in-built anonymisation function.
Consent of the client to matched principal trading	Records of clients' consent to the crypto-asset service provider engaging in matched principal trading on the platform for crypto-assets that it operates, as provided in Article 76(6) of Regulation (EU) 2023/1114.
Exchange of crypto-assets for funds or other crypto-assets	
Price and limits	Records of the price of the crypto-assets or of the method for determining the price of the crypto-assets proposed to exchange for funds or other crypto-assets, as well as any applicable limits determined by the crypto-asset service provider on the amount to be exchanged, as provided in Article 77(2) of Regulation (EU) 2023/1114. Such records shall include for each price, method for determining the price and applicable limit: - the identification of the crypto-asset; - If the crypto-asset can be exchanged for funds or crypto-assets or both;

	- The price of the crypto-asset; - The amount of crypto-assets you exchange for another crypto-asset.
Placing of crypto-assets	
Information to clients or prospective clients	Records of the communications made in accordance with Article 79(1) of Regulation (EU) 2023/1114 and of the consent received from the offeror or person seeking admission to trading or any third party acting on its behalf.
Placing operations	Records of any placing operation of the crypto-asset service provider, as provided in Article 10(3) of Commission Delegated Regulation (EU) [RTS on conflicts of interest].
Advice and portfolio management	
Information to clients	Records of any communication made in accordance with Article 81(2), (4) and (9) of Regulation (EU) 2023/1114.
Assessment of suitability	Records of all information collected from each client and assessed to conduct the suitability assessment referred to in paragraph 1 of Article 81 of Regulation (EU) 2023/114, as well as all internal documents relating to such suitability assessment. Records of clients who did not provide the information required pursuant to Article 81(8) of Regulation (EU) 2023/1114.

Investment advice	Records of the time and date on which advice on crypto-assets was rendered, records of the crypto-assets that were recommended and the suitability report provided to the client in accordance with Article 81(13) of Regulation (EU) 2023/1114.
Periodic statement for portfolio management services	Records of any periodic statement provided to the client in accordance with Article 81(14) of Regulation (EU) 2023/1114.
Inducements	1. Records of any minor non-monetary benefit received by the crypto-asset service provider in accordance with Article 81(3), second subparagraph, of Regulation (EU) 2023/1114. Such records shall include, at least: (a) the nature of the minor non-monetary benefit and the date it was received; (b) the client and service or activity in relation to which it was received; (c) how such minor non-monetary benefit complies with Article 81(3), second subparagraph, of Regulation (EU) 2023/114. 2. Records of any inducements received by the crypto-asset service provider in accordance with Article 81(6) of Regulation (EU) 2023/1114. Such records shall include, at least: (a) the nature, amount and date the inducement was received; (b) the client and service or activity in relation to which it was received; (c) how such inducement complies with Article 81(6), first subparagraph, of Regulation (EU) 2023/114;

	(d) any communication made in accordance with Article 81(6), second subparagraph, of Regulation (EU) 2023/1114.
Transfer services	
Records to be kept by the crypto-asset service provider of the originator	Records of: (a) all instructions received; and (b) all information listed in Article 14(1) to (3) of Regulation (EU) 2023/1113; (c) the means of verification as provided in Article 14(6) of Regulation (EU) 2023/1113; (d) any suspension or rejection of any instruction to carry out a transfer of crypto-asset and the reason for such suspension or rejection.
Records to be kept by the crypto-asset service provider of the beneficiary	Records of: (a) all information listed in Article 14(1) to (3) of regulation (EU) 2023/1113; (b) the means of verification as provided for in Article 16(3) of Regulation 2023/1113; (c) any return, suspension or rejection of a transfer of crypto-asset and the reason for such return, suspension or rejection; (d) any measures taken in accordance with Article 17(2) of Regulation (EU) 2023/1113, together with the identification of the relevant crypto-asset service providers.

Records to be kept by intermediary crypto-asset service providers	Records of: (a) all information listed in Article 14(1) to (3) of regulation (EU) 2023/1113; (b) any return, suspension or rejection of a transfer of crypto-asset and the reason for such return, suspension or rejection; (c) any measures taken in accordance with Article 21(2) of Regulation (EU) 2023/1113, together with the identification of the relevant crypto-asset service providers.

ANNEX II

Records of orders

Table 1

Legend for Table 2 and Table 4

SYMBOL	DATA TYPE	DEFINITION
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field
{CFI_CODE}	6 characters	ISO 10962 CFI code
{COUNTRYCODE_2}	2 alphanumerical characters	2 letter country code, as defined by ISO 3166-1 alpha-2 country code
{CURRENCYCODE_3}	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes

{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' – means that the letter 'T' shall be used; — 'hh' is the hour; — 'mm' is the minute; — 'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be recorded in UTC.
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted in the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. — decimal separator is '.' (full stop); — negative numbers are prefixed with '-' (minus); Values are rounded and not truncated.
{DTI}	9 alphanumerical characters	Digital token identifier as defined in ISO 24165 standard

{DTI_SHORT_NAME }	n alphanumeric characters	DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI
{INTEGER-n}	Integer number of up to n digits in total	Numerical field for both positive and negative integer values.
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{LEI}	20 alphanumerical characters	Legal entity identifier as defined in ISO 17442
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383
{NATIONAL_ID}	35 alphanumerical characters	The identifier is derived in accordance with Article 9 and Table 3 in Section 2 of the Annex.

Table 2

Details of orders to be kept

Field Number	Field Name	Field description	Details on the order data to be provided to the competent authority
		Part A — Identification of the relevant parties	
1	Client identification code	Code used to identify the client of the crypto-assets service provider which submitted the order. Where the client is a legal entity, the LEI code of the client shall be used. Where the client is not a legal entity, the {NATIONAL_ID} shall be used. This field shall be 'NONE' where the crypto-asset service provider has a direct interest to buy or sell.	{LEI} {NATIONAL_ID} {PNAL} 'NONE'
2	Investment decision within the CASP	Code used to identify the person or the algorithm within the crypto assets service provider who is taking the investment decision.	{NATIONAL_ID} — Natural persons {ALPHANUM-50} — Algorithms

		Where a natural person within the crypto-asset service provider takes the investment decision the person who is responsible or has primary responsibility for the investment decision shall be identified with the {NATIONAL_ID} Where an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity took the investment decision the field shall be populated with a code assigned according to Article 8. This field shall be left blank when the investment decision was not made by a person or algorithm within the crypto asset service provider.	
3	Execution within firm	Code used to identify the person or algorithm within the crypto-asset service provider determining the conditions for the execution of the transaction resulting from the order. Where a natural person determines the execution of the transaction, the person shall be identified by {NATIONAL_ID} Where an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its timing, price or quantity is responsible for the execution of the transaction, this field shall be populated with a code assigned by the crypto asset service provider, in accordance with Article 10. Where more than one person or a combination of persons and algorithms are involved in the execution of the transaction, the crypto asset service provider shall determine the trader or algorithm primarily responsible and populate this field with the identity of that trader or algorithm	{NATIONAL_ID} — Natural persons {ALPHANUM-50} — Algorithms
Part B - Trading capacity and liquidity provision			

4	Trading capacity	Indicates whether the crypto-asset service provider undertaking the transaction is carrying out matched principal trading, as defined under Article 3(1), point 40 of Regulation (EU) 2023/1114 or exchange crypto-assets for funds as defined under Article 3(1), point 19 of Regulation (EU) 2023/1114. Where the order submission does not result from the crypto-asset service provider carrying out matched principal trading or exchanging crypto-assets for funds or other crypto-assets, the field shall indicate that the transaction was carried out under any other capacity.	'DEAL' — Exchange crypto-assets for funds or other crypto-assets 'MTCH' — Matched principal 'AOTC' — Any other capacity
Part C - Date and time			
5	Date and Time	The date and time for each event listed in Section [G] and [J].	{DATE_TIME_FORMAT}
Part D - Validity period and order restrictions			
6	Validity period	Good-For-Day: the order expires at the end of the trading day on which it was entered in the order book Good-Till-Cancelled: the order will remain active in the order book and be executable until it is actually cancelled. Good-Till-Time: the order expires at the latest at a pre-determined time within the current trading session. Good-Till-Date: the order expires at the end of a specified date.	'DAVY' — Good-For-Day 'GTCV' — Good-Till-Cancelled 'GTTV' — Good-Till-Time 'GTDV' — Good-Till-Date

		Good-Till-Specified Date and Time: the order expires at a specified date and time. Good After Time: the order is only active after a pre-determined time within the current trading session. Good After Date: the order is only active from the beginning of a pre-determined date Good After Specified Date and Time: the order is only active from a pre-determined time on a pre-determined date. Immediate-Or-Cancel: an order which is executed upon its entering into the order book (for the quantity that can be executed) and which does not remain in the order book for the remaining quantity (if any) that has not been executed. Fill-Or-Kill: an order which is executed upon its entering into the order book provided that it can be fully filled: in the event the order can only be partially executed, then it is automatically rejected and cannot therefore be executed. Other: any additional indications that are unique for specific business models, trading platforms or systems.		'GTSV' — Good-Till-Specified Date and Time 'GATV' — Good After Time 'GADV' — Good After Date 'GASV' — Good After Specified Date and Time 'IOCV' — Immediate-Or-Cancel 'FOKV' — Fill-Or-Kill or {ALPHANUM-4} characters not already in use for the trading venue's own classification.

7	Order restriction	Good For Closing Price Crossing Session: where an order qualifies for the closing price crossing session.	'SESR' — Good For Closing Price Crossing Session
		Valid For Auction: the order is only active and can only be executed at auction phases (which can be pre-defined by the CASP client who submitted the order, e.g., opening and/closing auctions and/or intraday auction).	VFAR' — Valid For Auction
		Valid For Continuous Trading only: the order is only active during continuous trading.	'VFCR' — Valid For Continuous Trading only
		Other: any additional indications that are unique for specific business models, trading platforms or systems.	{ALPHANUM-4} characters not already in use for the trading venue's own classification.
			This field shall be populated with multiple flags separated by a comma where more than one flag is applicable

8	Validity period and time	This field refers to the time stamp reflecting the time on which the order becomes active, or it is ultimately removed from the order book: Good for day: the date of entry with the timestamp immediately prior to midnight Good till time: the date of entry and the time to that specified in the order Good till date: will be the specified date of expiry with the timestamp immediately prior to midnight Good till specified date and time: the specified date and time of expiry Good after time: the date of entry and the specified time at which the order becomes active Good after date: the specified date with the timestamp immediately after midnight Good after specified date and time: the specified date and time at which the order becomes active Good till Cancel: the ultimate date and time the order is automatically removed by market operations Other: timestamp for any additional validity type.	{DATE_TIME_FORMAT}
Part E - Identification of the order			
9	Segment MIC code	Identification of the trading platform for crypto-asset where the order was submitted.	{MIC}

		If the trading platform for crypto-asset uses segment MICs then the segment MIC shall be used. If the trading platform for crypto-asset does not use segment MICs then the operating MIC shall be used. This field shall only be populated for orders to be executed on a trading platform for crypto-asset.	
10	Crypto-asset identification code	Unique and unambiguous identifier of the crypto-asset	‑{DTI}
		Part F - Events affecting the order	
11	New order, order modification, order cancellation, order rejections, partial or full execution	New order: submission of a new order to the CASP operating the trading platform for crypto-assets. Cancelled at the initiative of the client of the CASP: where the client decides upon its own initiative to cancel the order it has previously entered.	'NEWO' — New order 'CAME' — Cancelled at the initiative of the client of the CASP {ALPHANUM-4} characters not already in use for the trading platform own classification.
		Part G - Type of order	

12	Order type	Identifies the type of order submitted to the trading platform for crypto-asset as per the trading platform for crypto-asset specifications.	{ALPHANUM-50}
13	Order type classification	Classification of the order according to two generic order types. LIMIT order: in the cases where the order is tradable and STOP order: in the cases where the order becomes tradable only upon the realisation of a pre-determined price event.	The letters 'LMTO' for limit or the letters 'STOP' for stop.
Part H - Prices			
14	Limit price	The maximum price at which a buy order can trade or the minimum price at which a sell order can trade. The spread price for a strategy order. It can be negative or positive. This field shall be 'NONE' in case of orders that do not have a limit price or in case of unpriced orders. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/13} in case the price is expressed as monetary value. {DECIMAL-11/10} in case the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points 'NONE'

15	Additional limit Price	Any other limit price which may apply to the order. This field shall be left 'NONE' if not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10 where the price is expressed as a percentage or yield. {DECIMAL-18/17} in case the price is expressed as basis points 'NONE'
16	Stop price	The price that must be reached for the order to become `active. For stop orders triggered by events independent of the price of the crypto-asset, this field shall be populated with a stop price equal to zero. This field shall be 'NONE' if not relevant. Where price is reported in monetary terms, it shall be provided in the major currency unit.	{DECIMAL-18/13} where the price is expressed as a monetary value. {DECIMAL-11/10 where the price is

		If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency.	expressed as a percentage or yield.
		If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/17} in case the price is expressed as basis points 'NONE'
17	Pegged limit price	The maximum price at which a pegged order to buy can trade or the minimum price at which a pegged order to sell can trade.	{DECIMAL-18/13} where the price is expressed as a monetary value.
		This field shall be 'NONE' if not relevant.	
		Where price is reported in monetary terms, it shall be provided in the major currency unit.	{DECIMAL-11/10 where the price is expressed as a percentage or yield.
		If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency.	
		If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset.	{DECIMAL-18/17} in case the price is expressed as basis points 'NONE'

18	Transaction price	Traded price of the transaction excluding, where applicable, commission, other fees and accrued interest. Where price recorded in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall be populated with the value 'NOAP'. Where price is reported in monetary terms, it shall be provided in the major currency unit. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency.	{DECIMAL-18/13} where the price is expressed as a monetary value. "NOAP"
19	Price currency	Currency in which the trading price for the crypto-asset related to the order is expressed (applicable where the price is expressed as monetary value). Where the crypto-asset is traded in electronic money/e-money token, the Digital Token Identifier code shall be used. Where price of the crypto-asset is expressed in monetary terms and it is expressed in a currency pair, the currency pair in which the price for the crypto-asset related to the order is expressed shall be reported. The first currency code shall be that of the base currency and the second currency code shall be that of the quote currency. The quote currency determines the price of one unit of the base currency. The ISO currency code and the DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI shall be used to represent the fiat currency and the crypto asset respectively in the currency pair.	{CURRENCYCODE_3} {DTI} {CURRENCYCODE_3} should be used for fiat currencies in a currency pair {DTI_SHORT_NAME} should be used for crypto assets in a currency pair "NOAP"

20	Price notation	Indicates whether the price is expressed in monetary value, in percentage, in yield or in basis points.	'MONE' — Monetary value
			'PERC' — Percentage
			'YIEL' — Yield
			'BAPO' — Basis points
Part I - Order instructions			
21	Buy-sell indicator	To show if the order is to buy or sell.	'BUYI' — buy
			'SELL' — sell
22	Order status	To identify orders that are active/inactive/suspended: Active — non-quote orders that are tradable. Inactive — non-quote orders that are not tradable.	'ACTI'- active or 'INAC'- inactive
23	Quantity notation	Indicates whether the quantity reported is expressed in number of units, as a nominal value or as a monetary value, or crypto-assets units.	'UNIT' — Number of units

				'NOML' — Nominal value
				'MONE' — Monetary value
				'CRYP' – Crypto-asset
24	Quantity currency	Currency in which the quantity is expressed. The currency shall refer to the crypto-asset units, even when the transaction is denominated in sub-components of that crypto-asset. Field only needs to be populated where the quantity is expressed as a nominal or monetary value or crypto-assets units.		{CURRENCYCODE_3} {DTI}
25	Initial quantity	The number of units of the crypto-asset in the order. In case the order pertains a fraction of a crypto-asset, indicate the quantity in decimal notation of the unit. The nominal or monetary value of the crypto-asset.		{DECIMAL-18/17} in case the quantity is expressed as number of units {DECIMAL-18/5} in case the quantity is expressed as monetary or nominal value

26	Remaining quantity	The total quantity that remains in the order book after a partial execution or in the case of any other event affecting the order. On a partial fill order event, this shall be the total remaining volume after that partial execution. On an order entry this shall equal the initial quantity.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value
27	Traded quantity	Where there is a partial or full execution, this field shall be populated with the executed quantity	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value

28	Minimum Acceptable Quantity (MAQ)	The minimum acceptable quantity for an order to be filled which can consist of multiple partial executions and is normally only for non-persistent order types. This field shall be 'NONE' if not relevant.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value 'NONE'
29	Minimum executable size (MES)	The minimum execution size of any individual potential execution. This field shall be left blank if not relevant.	{DECIMAL-18/17} in case the quantity is expressed as a number of units {DECIMAL-18/5} where the quantity is expressed as monetary or nominal value

30	MES first execution only	Specifies whether the MES is relevant only for the first execution. This field can be left blank where field 29 is left blank.	'true' 'false'
31	Passive only indicator	Indicates if the order is submitted to the trading platform for crypto-asset with a characteristic/flag, such that the order shall not immediately execute against any contra visible orders.	'true' 'false'
32	Passive or aggressive indicator	On partial fill and fill order events, indicates whether the order was already resting on the order book and providing liquidity (passive), or the order initiated the trade and thus took liquidity (aggressive). This field shall be left blank if not relevant	'PASV' — passive or 'AGRE' — aggressive.
33	Self-Execution Prevention	Indicates if the order has been entered with self-execution prevention criteria, so that it would not execute with an order on the opposite side of the book entered by the same member or participant.	'true' 'false'
34	Trading platform for crypto-asset transaction identification code	For orders executed on trading platform for crypto-assets, alphanumerical code assigned by the trading platform for crypto-assets to the transaction pursuant to Article 16 of Regulation [RTS under article 76 of MiCA].	{ALPHANUM-52}

		The code shall be unique, consistent, and persistent per ISO10383 segment MIC and per trading day.	
		The components of the transaction identification code shall not disclose the identity of the counterparties to the transaction for which the code is maintained.	
		For transactions executed by means of transmission within the meaning of Article 1(3) point a) to an entity providing crypto-asset services outside of the Union, this information shall be recorded where available.	
Part J - Trading phases, indicative auction price and volume			
35	Indicative auction price	The price at which each auction is due to uncross in respect to the crypto-asset for which one or more orders have been placed.	{DECIMAL-18/5} in case the price is expressed as monetary or nominal value. Where price reported in monetary terms, it shall be provided in the major currency unit. DECIMAL-11/10} in case the price is expressed as a percentage or yield

36	Indicative auction volume	The volume (number of units of crypto-asset) that can be executed at the indicative auction price in field 50 if the auction ended at that precise moment of time.	{DECIMAL-18/17} in case the quantity is expressed as number of units {DECIMAL-18/5} in case the quantity is expressed as monetary or nominal value
	Part K – Order transmission		
37	Transmitting crypto-asset service provider	In case of transmission of order under Article 11, the LEI code of the transmitting crypto-asset service provider.	{LEI}
38	Transmission of an order indicator	'true' shall be populated by the transmitting firm within the transmitting firm's report where the conditions for transmission specified in Article 11 were not satisfied 'false' – in all other circumstances	"true" or "false"

Table 3

List of natural person national identifiers to be used for the purposed of Article 9

ISO 3166 — 1 (alpha 2)	Country name	1st priority identifier	2nd priority identifier	3rd priority identifier
AT	Austria	CONCAT		
BE	Belgium	Belgian National Number (Numéro de registre national — Rijksregisternummer)	CONCAT	
BG	Bulgaria	Bulgarian Personal Number	CONCAT	
CY	Cyprus	National Passport Number	CONCAT	
CZ	Czech Republic	National identification number (Rodné číslo)	Passport Number	CONCAT
DE	Germany	CONCAT		
DK	Denmark	Personal identity code 10 digits alphanumerical: DDMMYYXXXX	CONCAT	
EE	Estonia	Estonian Personal Identification Code (Isikukood)		
ES	Spain	Tax identification number (Código de identificación fiscal)		
FI	Finland	Personal identity code	CONCAT	

FR	France	CONCAT		
GB	United Kingdom	UK National Insurance number	CONCAT	
GR	Greece	10 DSS digit investor share	CONCAT	
HR	Croatia	Personal Identification Number (OIB — Osobni identifikacijski broj)	CONCAT	
HU	Hungary	CONCAT		
IE	Ireland	CONCAT		
IS	Iceland	Personal Identity Code (Kennitala)		
IT	Italy	Fiscal code (Codice fiscale)		
LI	Liechtenstein	National Passport Number	National Identity Card Number	CONCAT
LT	Lithuania	Personal code (Asmens kodas)	National Passport Number	CONCAT
LU	Luxembourg	CONCAT		
LV	Latvia	Personal code (Personas kods)	CONCAT	
MT	Malta	National Identification Number	National Passport Number	
NL	Netherlands	National Passport Number	National identity card number	CONCAT

NO	Norway	11 digit personal id (Foedselsnummer)	CONCAT	
PL	Poland	National Identification Number (PESEL)	Tax Number (Numer identyfikacji podatkowej)	
PT	Portugal	Tax number (Número de Identificação Fiscal)	National Passport Number	CONCAT
RO	Romania	National Identification Number (Cod Numeric Personal)	National Passport Number	CONCAT
SE	Sweden	Personal identity number	CONCAT	
SI	Slovenia	Personal Identification Number (EMŠO: Enotna Matična Številka Občana)	CONCAT	
SK	Slovakia	Personal number (Rodné číslo)	National Passport Number	CONCAT
All other countries	National Passport Number	CONCAT		

Table 4

Records of transactions

Field no	FIELD	CONTENT TO BE RECORDED	Details on transaction data to be provided to the competent authority

1	Transaction status	Indication as to whether the transaction is new or a cancellation.	'NEWT' - New 'CANC' - Cancellation
2	Transaction Record Number	Identification number that is unique to the executing firm for each record	{ALPHANUM-52}
3	Trading platform for crypto-asset transaction identification code	This is a number generated by the trading platform for crypto-asset and disseminated to both the buying and the selling parties in accordance with Article 16 of [RTS under Article 76 of Regulation (EU) 2023/1114]. Where relevant, the transaction hash or other identification alphanumerical string which is automatically generated on the DLT that enables to uniquely identify a specific transaction.	{ALPHANUM-52}
4	Executing entity identification code	Code used to identify the entity executing the transaction.	{LEI}
5	CASP covered by MiCA	Indicates whether the entity identified in Field 4 is a crypto-asset service provider subject to Regulation (EU) 2023/1114.	'true'- yes 'false'- no
6	Buyer identification code	Code used to identify the acquirer of the crypto-asset. Where the buyer is a legal entity, the LEI code of the acquirer shall be used. Where the buyer is a natural person, the identifier specified in Article 9 of this Regulation. Where the order was transmitted for execution within the meaning of Article 1(3) (a) to a firm performing crypto-asset services outside of the Union, the MIC code of the platform or the LEI of the firm shall be used.	{LEI} {MIC} {NATIONAL_ID} 'INTC'

		If the crypto-asset service provider executes the transaction on a trading platform located in a third country, the LEI of the buyer shall be recorded for entities eligible for LEIs or the National ID for entities that are not eligible for LEIs. 'INTC' shall be used to designate an aggregate client account within the investment firm in order to report a transfer into or out of that account with an associated allocation to the individual client(s) out of or into that account respectively.	
7	Country of the branch of the crypto-asset service provider for the buyer	Where the buyer is a client, this field should identify the country of the branch that received the order from the client or made an investment decision for a client in accordance with a discretionary mandate given to it by the client as required by Article 16. Where this activity was not conducted by a branch this should be populated with the country code of the home Member State of the crypto-asset service provider or the country code of the Member State where the crypto-asset service provider has established its registered office.	{COUNTRYCODE_2}
8	Buyer - first name(s)	Full first name(s) of the buyer. In case of more than one first name, all names shall be included in this field separated by a comma.	{ALPHANUM-140}
9	Buyer - surname(s)	Full surname(s) of the buyer. In case of more than one surname, all surnames shall be included in this field separated by a comma.	{ALPHANUM-140}
10	Buyer - date of birth	Date of birth of the buyer.	{DATEFORMAT}
11	Buyer decision maker code	Code used to identify the person who makes the decision to acquire the crypto-asset. Where the decision is made by a crypto-asset service provider, this field shall be	{LEI} {NATIONAL_ID}

		populated with the identity of the crypto-asset service provider rather than the individual making the investment decision.

Where the decision maker is a legal entity, the LEI code of the decision maker shall be used.

Where the decision maker is a non-legal entity, the identifier specified in Article 9 shall be used. | |
12	Buy decision maker - First Name(s)	Full first name(s) of the decision maker for the buyer. In case of more than one first name, all names shall be included in this field separated by a comma.	{ALPHANUM-140}
13	Buy decision maker – Surname(s)	Full surname(s) of the decision maker for the buyer. In case of more than one surname, all surnames shall be included in this field separated by a comma.	{ALPHANUM-140}
14	Buy decision maker - Date of birth	Date of birth of the decision maker for the buyer.	{DATEFORMAT}
15	Seller identification code	Code used to identify the disposer of the crypto-asset.

Where the seller is a legal entity, the LEI code of the disposer shall be used.

Where the seller is not a legal entity, the identifier specified in Article 9 shall be used.

Where the order was transmitted for execution within the meaning of Article 7(3) a) to a firm performing crypto-asset services outside of the Union, the MIC code of the platform or the LEI of the firm shall be used. | {LEI}

{MIC}

{NATIONAL_ID}

'INTC' |

		If the crypto-asset service provider executes the transaction on a trading platform located in a third country, the LEI of the seller shall be provided for entities eligible for LEIs or the National ID for entities that are not eligible for LEIs. 'INTC' shall be used to designate an aggregate client account within the CASP in order to record a transfer into or out of that account with an associated allocation to the individual client(s) out of or into that account respectively.	
16	Country of the branch for the seller	Where the seller is a client, this field should identify the country of the branch that received the order from the client or made an investment decision for a client in accordance with a discretionary mandate given to it by the client as required by Article 16. Where this activity was not conducted by a branch this should be populated with the country code of the home Member State of the crypto-asset service provider or the country code of the country where the crypto-asset service provider has established its head office or registered office (in the case of third country firms).	{COUNTRYCODE_2}
17	Seller - first name(s)	Full first name(s) of the seller. In case of more than one first name, all names shall be included in this field separated by a comma.	{ALPHANUM-140}
18	Seller - surname(s)	Full surname(s) of the seller. In case of more than one surname, all surnames shall be included in this field separated by a comma.	{ALPHANUM-140}
19	Seller - date of birth	Date of birth of the seller	{DATEFORMAT}
20	Seller decision maker code	Code used to identify the person who makes the decision to sell the crypto-asset. Where the decision is made by a crypto-asset service provider, this field shall be populated with the identity of the CASP rather than the individual making the investment decision.	{LEI} {NATIONAL_ID}

		Where the decision maker is a legal entity, the LEI code of the decision maker shall be used. Where the decision maker is a non-legal entity, the identifier specified in Article 9 shall be used.	
21	Sell decision maker - First Name(s)	Full first name(s) of the decision maker for the seller. In case of more than one first name, all names shall be included in this field separated by a comma.	{ALPHANUM-140}
22	Sell decision maker – Surname(s)	Full surname(s) of the decision maker for the seller. In case of more than one surname, all surnames shall be included in this field separated by a comma.	{ALPHANUM-140}
23	Sell decision maker - Date of birth	Date of birth of the decision maker for the seller.	{DATEFORMAT}
24	Transmission of order indicator	'true' shall be populated by the transmitting firm within the transmitting firm's report where the conditions for transmission specified in Article 11 were not satisfied 'false' – in all other circumstances	'true' 'false'
25	Transmitting firm identification code for the buyer	Code used to identify the firm transmitting the order. This shall be populated by the receiving firm within the receiving firm's report with the identification code provided by the transmitting firm.	{LEI}
26	Transmitting firm identification code for the seller	Code used to identify the firm transmitting the order. This shall be populated by the receiving firm within the receiving firm's report with the identification code provided by the transmitting firm	{LEI}
27	Trading date time	Date and time when the transaction was executed. For transactions not executed on a trading venue, the date and time shall be when	{DATE_TIME_FORMAT}

		the parties agree the content of the following fields: quantity, price, currencies in fields 31, 34 and 44, instrument identification code, instrument classification and underlying instrument code, where applicable. For transactions not executed on a trading venue the time recorded shall be at least to the nearest second. Where the transaction results from an order transmitted by the executing firm on behalf of a client to a third party where the conditions for transmission set out in Article 11 were not satisfied, this shall be the date and time of the transaction rather than the time of the order transmission.	
28	Trading capacity	Indicates whether the CASP undertaking the transaction is carrying out matched principal trading, as defined under Article 3(1), point 40 of Regulation (EU) 2023/1114 or exchange of crypto-assets for funds as defined under Article 3(1), point 19 of Regulation (EU) 2023/1114. Where the transaction does not result from the executing firm carrying out matched principal trading or through exchange of crypto-assets for funds, the field shall indicate that the transaction was carried out under any other capacity.	'DEAL' - Exchange of crypto-assets for funds or other crypto-assets 'MTCH' - Matched principal 'AOTC' - Any other capacity
29	Quantity	The number of units of the crypto-assets or the monetary value of the crypto asset. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset. The information reported in this field shall be consistent with the values provided in fields 31 and 32.	{DECIMAL-18/17} in case the quantity is expressed as number of units {DECIMAL-18/5} in case the quantity is expressed as monetary or nominal value
30	Quantity currency	Currency in which the quantity is expressed.	{CURRENCYCODE_3}

				{DTI}
		Only applicable if quantity is expressed as nominal or monetary value.		
		The quantity shall refer to the crypto-asset units, even when the transaction is denominated in sub-components of that crypto-asset.		
		Where the crypto-asset is traded in electronic money/e-money token, the Digital Token Identifier code shall be used.		
31	Price	Traded price of the transaction excluding, where applicable, commission, any other fee and accrued interest. If the crypto-asset is traded based on a currency pair the price shall express the quantity of the quote currency for one unit of the base currency. If the price is expressed in sub-components of that crypto-asset, it shall be nonetheless recorded in decimal notation of the price expressed in units of that crypto-asset. Where price is recorded in monetary terms, it shall be provided in the major currency unit. Where price is not applicable, the value shall be 'NOAP' . The information recorded in this field shall be consistent with the values provided in field 30.	{DECIMAL-18/13} in case the price is expressed as monetary value {DECIMAL-11/10} in case the price is expressed as percentage or yield {DECIMAL-18/17} in case the price is expressed as basis points 'NOAP' in case the price is not applicable
32	Price Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value). 	{CURRENCYCODE_3} {DTI}

		Where price of the crypto-asset is expressed in monetary terms and it is expressed in a currency pair, the currency pair in which the price for the crypto-asset related to the order is expressed shall be reported. The first currency code shall be that of the base currency and the second currency code shall be that of the quote currency. The quote currency determines the price of one unit of the base currency. The ISO currency code and the DTI short name as registered according to the ISO 24165-2 data elements for registration of the DTI shall be used to represent the fiat currency and the crypto asset respectively in the currency pair.	{CURRENCYCODE_3} should be used for fiat currencies in a currency pair {DTI_SHORT_NAME} should be used for crypto assets in a currency pair "NOAP"
33	Trading platform for crypto-asset	Identification of the trading platform for crypto-asset where the transaction was executed. Use the ISO 10383 segment MIC for transactions executed on a trading platform for crypto-asset. Where the segment MIC does not exist, use the operating MIC. Use MIC code 'XOFF' for crypto-assets admitted to trading, or traded on a trading platform for crypto-asset or for which a request for admission was made, where the transaction on that crypto-asset is not executed on a trading platform for crypto-asset. Use MIC code 'XXXX' for crypto-assets that are not admitted to trading or traded on a trading platform for crypto-asset or for which no request for admission has been made.	{MIC}
34	Country of the branch membership	Code used to identify the country of a branch of the crypto-asset service provider whose trading platform for crypto-asset membership was used to execute the transaction. Where a branch's trading platform for crypto-asset membership was not used, this	{COUNTRYCODE_2}

		field shall be populated with the country code of the home Member State of the crypto-asset service provider or the country code of the country where the firm has established its head office or registered office (in the case of third country firms). This field shall only be populated for the market side of a transaction executed on a trading platform for crypto-asset.	
35	Up-front payment	Monetary value of any up-front payment received or paid by the seller. Where the seller receives the up-front payment, the value populated is positive. Where the seller pays the up-front payment, the value populated is negative.	{DECIMAL-18/5}
36	Up-front payment currency	Currency of the up-front payment.	{CURRENCYCODE_3}
37	Complex trade component id	Identifier, internal to the crypto-asset service provider, to identify all the transaction records related to the same execution of a combination of crypto-assets. The code must be unique at the level of the firm for the group of transaction records related to the execution.	{ALPHANUM-35}
38	Crypto-asset identification code	Code used to identify the crypto-asset. This field applies to crypto-assets for which a request for admission to trading has been made, that are admitted to trading on a trading platform for crypto-assets.	{DTI}
39	Crypto-asset full name	Full name of the crypto-asset.	{ALPHANUM-350}
40	Crypto-asset classification	Taxonomy used to classify the crypto-asset. or A complete and accurate CFI code shall be provided when available.	ART EMT

			OT
			{CFI_CODE}
41	Investment decision within the crypto-asset service provider	Code used to identify the person or algorithm within the crypto-asset service provider taking the investment decision. The code shall be unique over time for each set of code or trading strategy that constitutes the algorithm and shall be used consistently when referring to the algorithm or version of the algorithm once assigned to it. For natural persons, the identifier specified in Article 9 shall be used If the investment decision was made by an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity, the field shall be populated as set out in Article 8. Field only applies for investment decision within the firm. Where the transaction is for a transmitted order that has met the conditions for transmission set out in Article 11, this field shall be populated by the receiving firm within the receiving firm's record using the information received from the transmitting firm.	{NATIONAL_ID} - Natural persons {ALPHANUM-50} - Algorithms
42	Country of the branch responsible for the person making the investment decision	Code used to identify the country of the branch of the crypto-asset service provider for the person taking the investment decision, as set out in Article 16. Where the person taking the investment decision was not supervised by a branch, this field shall be populated with the country code of the home Member State of the	{COUNTRYCODE_2}

		crypto-asset service provider or the country code of the Member State where the crypto-asset service provider has established its registered office. Where the transaction is for a transmitted order that has met the conditions for transmission set out in Article 11, this field shall be populated by the receiving firm within the receiving firm's record using the information received from the transmitting firm. This field is not applicable when the investment decision was made by an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity.	
43	Execution within firm	Code used to identify the person or algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity within the crypto-asset service provider who determines the conditions for the execution. For natural persons, the identifier specified in Article 9 shall be used If the execution was made by an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity, the field shall be populated as set out in Article 8.	{NATIONAL_ID} - Natural persons {ALPHANUM-50} - Algorithms CLIENT - Client
44	Country of the branch supervising the person determining the conditions for execution	Code used to identify the country of the branch of the crypto-asset service provider for the person determining the execution of the transaction, as set out in Article 16. Where the person responsible was not supervised by a branch, this field shall be populated with the country code of the home Member State of the crypto-asset service provider, or the country code of the country where the crypto-asset service provider has established its registered office.	{COUNTRYCODE_2}

		This field is not applicable when the execution was made by an algorithm automatically determining individual parameters of orders such as whether to initiate the order or its the timing, price or quantity.	
45	Short selling indicator	Designation to identify any sale of a crypto-asset which the seller does not own at the time of entering into the agreement to sell including such a sale where at the time of entering into the agreement to sell the seller has borrowed or agreed to borrow the share or debt instrument for delivery at settlement.	Yes/No

Table 5

On-chain data

Field no	FIELD	CONTENT TO BE RECORDED	Details to be provided to the competent authority
1	Transaction hash	Identifier enabling the unique identification of a specific transaction occurring on the network.	ALPHANUM-140}
2	Wallet addresses	Code uniquely identifying the wallet, belonging to the buyer/seller, to which the crypto-asset is transferred.	{ALPHANUM-52}
3	Smart Contract Addresses	Code uniquely identifying the smart contract address.	{ALPHANUM-52}
4	Timestamp	Timestamp of the creation of the block.	{DATE_TIME_FORMAT}
5	Quantity/ Current Total Supply	Ratio between the transferred quantity and the current floating amount of the asset.	
6	Token ID	Digital Token Identifier	{DTI}
7	Gas fee	Fees which are requested to cover the costs for the creation of a new block.	
8	Gas limit	This is the maximum amount of "gas" that an on-chain user is willing to pay for the executions of a specific transaction.	

9	Data size	This field is connected to the above. On-chain transaction can contain "attachments" in a specific *data* field that affect the "gas" required to process the transaction.	
10	To	The unique identifiers for buyer and seller are usually generated by the DLT protocol on the basis of the buyer/seller wallet addresses.	{ALPHANUM-52}
11	From	The unique identifier for seller usually generated by the DLT protocol on the basis of the seller wallet addresses.	{ALPHANUM-52}
12	Currency	Currency code	{CURRENCYCODE_3} {DTI}
13	Transaction Record Number	Identification number reported in Field 2 of Table 4 that is unique to the executing firm for each record to ensure that a link can be made between the on-chain report and the off-chain one.	{ALPHANUM-52}

9.2.7 RTS on the data necessary for the classification of white papers

COMMISSION DELEGATED REGULATION (EU) 2024/XXX

of XXXX

supplementing Regulation (EU) No 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying the data necessary for the classification of crypto-asset white papers and the practical arrangements to ensure that such data is machine-readable

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) No 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets and amending Regulation (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937[81], and in particular Article 109(8), third subparagraph, thereof,

Whereas:

(1) It is important to ensure that investors in crypto-assets are appropriately informed about the characteristics, functions and risks of the crypto-assets they invested in or intend to invest in. To this purpose, Regulation (EU) 2023/1114 (MiCA) requires ESMA to establish a comprehensive register of crypto-asset white papers providing one single European access point to standardised, reliable, and comparable information across crypto-assets.

(2) Such register aims to provide a single portal which investors and other stakeholders can use to search white papers via a standardised set of search criteria. This will contribute to the transparency of the market of crypto-assets and to the accessibility of white papers across the EU.

(3) Under Regulation (EU) 2023/1114 the classification of a given crypto-asset has a major impact on the applicable requirements. The register referred to in Article 109(1) of Regulation (EU) 2023/1114 aims to facilitate the accessibility of white papers classified

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on the basis of the categories foreseen by that Regulation and support national competent authorities to verify that the requirements are applied consistently.

(4)   Since crypto-assets that are not financial instruments cannot at present be described by using the ISO Classification of Financial Instruments (CFI) code, the standard universal method of classification has to be developed. In particular, the ISO CFI is being revised to accommodate for the classification of crypto-assets and the revision will not be finalised before the application of this Regulation. Therefore until the revised CFI standard becomes available, an interim taxonomy indicating the type of crypto-assets as prescribed in this Regulation should be used.

(5)   In order to identify the white papers by type of crypto-asset consistently in the register referred to in Article 109(1) of Regulation (EU) 2023/1114¸ an international standard identifier for digital tokens, the Functionally Fungible Group Digital Token Identifier (FFG DTI) and the Digital Token Identifiers issued by the Digital Token Identifiet Fundation (DTIF) should be used. These identifiers areappropriate as they follow the principles of uniqueness, neutrality, reliability, open source, scalability, accessibility on a cost-recovery basis and they are offered under an appropriate governance framework. Therefore it is appropriate to use the DTI for the purpose of identifying crypto-assets and the FFG DTI to identify white papers pertaining to those crypto assets. Such an identifier allows users to retrieve the main caracteristics of the crypto-assets, including their technology-specific features, and to group tokens issued on several blockchains that are pertaining to the same white paper.

(6)   In order to ensure certain and efficient identification, issuers of crypto-assets, offerors or persons seeking admission to trading should ensure that they are identified in their white papers using valid legal entity identifiers (LEIs).

(7)   A metadata should clearly indicate the type of submission when a white paper is updated or modified pursuant to Article 12, Article 25 or Article 51(12) of Regulation (EU) 2023/1114.

(8)   This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority.

(9)   The European Securities and Markets 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 Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[82].

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[82] 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).

HAS ADOPTED THIS REGULATION:

Article 1

Data for the classification of white papers

When providing ESMA with a copy of a white paper, the competent authority shall provide to ESMA the relevant accompanying data for the classification of white papers as set out in the tables in Annex I to this Regulation.

Article 2

Practical arrangements to ensure the machine readability of the data

The competent authority shall provide the accompanying data referred to in Article 1 in a common format in accordance with the ISO 20022 methodology and in accordance with the format and standards set out in the Tables 1 and 2 in the Annex to this Regulation.

Article 3

Legal Entity Identifiers

1. Persons drawing up a crypto-asset white paper referred to in Articles 6, 19 or 51 of Regulation (EU) 2023/1114 shall ensure that they are identified with a pertinent, validated, issued and duly renewed legal entity identifier code in the data accompanying the white paper prepared pursuant to Article 5, Article 19 or Article 51 of Regulation (EU) 2023/1114. The legal entity identifier code shall be compliant with the ISO 17442 standard and included in the Global Legal Entity Identifier database maintained by the Central Operating Unit appointed by the r Regulatory Oversight Committee.

2. An operator of a trading platform shall not admit to trading a crypto-asset pursuant to Article 5(2) of Regulation (EU) 2023/1114 prior to obtaining the legal entity identifier code from the offeror or the person seeking admission to trading or the issuer of the crypto-asset.

3. Where the white paper referred to in Articles 6, 19 or 51 of Regulation (EU) 2023/1114 is drawn up by a person other than the issuer, this person shall ensure that the legal entity identifiers of the issuer accompanying the white paper is pertinent, validated and issued in accordance with the terms of any of the Local Operating Units of the Global Legal Entity Identifier System. The legal entity identifier code shall be compliant with the ISO 17442 standard and included in the Global Legal Entity Identifier database maintained by the Central Operating Unit appointed by the Regulatory Oversight Committee.

Article 4

Identification of the crypto-asset and the related white paper

1. The Crypto-assets white paper shall be identified with a valid ISO 24165 Functionally Fungible Digital Token Identifier pertaining to the group of crypto-assets to which the white paper relates.

2. The crypto-asset or crypto-assets to which the white paper relates shall be individually identified with a valid ISO 24165 Digital Token Identifier assigned to each of the crypto-assets to which the white paper relates.

Article 5

Entry into force and application

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]

ANNEX

Data necessary for the classification of crypto-asset white papers

Table 1

Legend for Table 2

SYMBOL	DATA TYPE	DEFINITION
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CFI_CODE}	6 characters	ISO 10962 CFI code

{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' – means that the letter 'T' shall be used; — 'hh' is the hour; — 'mm' is the minute; — 'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be recorded in UTC.
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted in the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. — decimal separator is '.' (full stop); — negative numbers are prefixed with '-' (minus); Values are rounded and not truncated.
{DTI}	9 alphanumerical characters	Digital token identifier as defined in ISO 24165 standard
{FFG DTI}	9 alphanumerical characters	Code to identify a group of equivalent Digital token identifiers as defined in ISO 24165 standard
{INTEGER-n}	Integer number of up to n digits in total	Numerical field for both positive and negative integer values.

| {LEI} | 20 alphanumerical characters | Legal entity identifier as defined in ISO 17442 |
| {MIC} | 4 alphanumerical characters | Market identifier as defined in ISO 10383 |

Table 2

Data necessary for the classification of crypto asset white papers

Number	Field	Content	Format and standards
1	Record identifier	Unique identifier of the uploaded record, assigned by the sending competent authority	{ALPHANUM-50}
2	Classification	When available, the ISO 10962 CFI code	{CFI_CODE}
3	Type of white paper	The type of white paper notified. Where the white paper concerns asset-referenced tokens, the code 'ARTW' shall be used, where the white paper concerns e-money tokens, the code 'EMTW' shall be used and where the white paper concerns crypto-assets other than	Choice from list of predefined values: 'ARTW' 'EMTW'

			asset-referenced tokens and e-money tokens the code 'OTHR' shall be used.	'OTHR'
4	Legal entity identifier of the operator of the trading platform	Legal entity identifier of the operator of the trading platform.	{LEI}
5	Identifier of operator of the trading platform	Segment MIC for the trading platform operated by the CASP, where available, otherwise operating MIC.	{MIC}
6	Legal entity identifier of the person seeking admission to trading	Legal entity identifier of the person seeking admission to trading drafting the white paper. This field is only applicable to cases where the LEI of the person seeking admission is different from the one of the issuer.	{ISO 17442 Legal Entity Identifier}
7	Legal entity identifier of the offeror	Legal entity identifier of the offeror drafting the white paper. This field is only applicable to cases where the Legal Entity Identifier of the offeror is different from the one of the issuer.	{ISO 17442 Legal Entity Identifier}
8	Legal entity of persons drafting the white paper other than the issuer, the offeror, the person seeking admission to trading	Legal entity identifier of the offeror drafting the white paper. This field is only applicable to cases where the Legal Entity Identifier of the offeror is different from the one of the issuer, the offeror or the person seeking admission to trading.	{ISO 17442 Legal Entity Identifier}
9	Name of the issuer	Name of the issuer as recorded in the reference data pertaining to its ISO 17442 Legal Entity Identifier	{ALPHANUM-280}

10	Legal form of the issuer	Legal form of the [*same comment as above on how to refer to the relevant entity*] in accordance with the ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)' for classification of legal entities.	ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)'
11	Legal entity identifier of the issuer	Legal entity identifier of the issuer as specified in Article 3 of this regulation	ISO 17442 Legal Entity Identifier
12	Date and time of notification	Date and time of latest notification of the white paper to the competent authority	YYYY-MM-DD Thh:mm:ss.ddddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' – means that the letter 'T' shall be used — 'hh' is the hour; — 'mm' is the minute; — 'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be recorded in UTC.
13	Country of the registered office of the issuer	Code to identify the country	A 2 letter country code, as defined by ISO 3166-1 alfa-2 country code

14	The industry sector of the economic activities of the person to which the information relates	Code indicating the nature of the issuer's activities. The codes correspond to the main sections of Statistical Classification of economics activities in the European Community (NACE) as defined in Regulation (EC) No 1893/2006 of the European Parliament and of the Council:	Drop down list of NACE codes
15	Language or languages of the white paper	Language or languages in which the crypto-asset white paper is drafted When multiple languages have been used, field [XX] shall be reported as many times as necessary.	Drop down list with EU official languages
16	Digital Token Identifier	Digital Token Identifier Code used to uniquely identify the crypto-asset or each of the several crypto assets to which the white paper relates.	ISO 24165 DTI
17	Digital token short name	Short name or ticker symbol used to represent this digital token, as represented in alphanumeric basic Latin characters	{ALPHANUM-50}
18	Functionally Fungible Digital Token Identifier	Code used to identify the white paper.	ISO 24165 FFG DTI
19	The type of submission	Type of submission as per ITS xxx/xxx [ESAP]	NEWT = New MODI = Modify EROR = Error CORR = Correction

9.2.8 ITS on standard forms and templates for the crypto-asset white paper

COMMISSION IMPLEMENTING REGULATION (EU) 2024/XXX

of XXXX

laying down implementing technical standards for the application of Regulation (EU) No 2023/1114 of the European Parliament and of the Council with regard to forms, formats and templates for the crypto-asset white papers

(Text with EEA relevance)

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 Regulation (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937[83], and in particular Articles 6(11) third subparagraph, 19(10) third subparagraph and 51(10) third subparagraph thereof,

Whereas:

(1)   Regulation (EU) 2023/1114 requires that, when drawing up a crypto asset white paper, issuers of crypto-assets, offerors, persons seeking admission to trading and operators of a trading platform admitting to trading a crypto-asset ensure that such a crypto-asset white paper contains information which is relevant to enable investors to make an informed investment decision and to make such white papers available in a machine-readable format.

(2)   The adoption of standardised templates for reporting such information ensures a high level of transparency and comparability of white papers, thus ensuring that investors in crypto-assets are appropriately informed about the characteristics and risks of the crypto-assets they invest in, of the issuer and of the offer or admission to trading.

(3)   In order to further facilitate the analysis and comparability of white papers, they should be marked up using eXtensible Business Reporting Language (XBRL). XBRL is a machine-readable format which allows for the automated consumption of large amount of information. It is well established and in use in a number of jurisdictions.

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[83] OJ L 150, 9.6.2023, p. 40.

(4)   In order to ensure the protection of retail investors, it is important that white papers are human readable and easily accessible without specialised software. The use of Inline XBRL technology for embedding XBRL markups in XHTML documents enables such documents to be at the same time machine-readable and human readable.

(5)   The use of XBRL requires the development of a taxonomy. The elements of the taxonomy to be used for the white papers should be exclusively the fields included in the standardised templates.

(6)   The taxonomy for the use of XBRL is accessed in the form of XBRL files ('XBRL taxonomy files'), which provide a structured representation of the fields to be reported. The fields and their appropriate data type should be made available in a simple human-readable form in this Regulation. It is important that persons drawing up a white paper use XBRL taxonomy files that are compliant with all relevant technical and legal requirements. To facilitate compliance and to enhance transparency, ESMA may publish the XBRL taxonomy files on its website in a machine-readable and freely downloadable format.

(7)   This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority ('ESMA'), in cooperation with the European Banking Authority.

(8)   The European Securities and Markets Authority has conducted open public consultations on the draft implementing technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[84],

HAS ADOPTED THIS REGULATION:

Article 1

General principles for the presentation of the information

1. Persons drawing up a crypto-asset white paper referred to in Articles 6, 19 or 51 of Regulation (EU) 2023/1114 shall provide the information required by this Regulation free of charge and in a manner that is non-discriminatory, concise, fair, clear and not misleading.

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[84] 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).

2. Persons referred to in paragraph 1 shall lay out the information required by this Regulation in accordance with the templates set out in Table 2, Table 3 or Table 4 of Annex II.

Article 2

Format of the white paper

1. Persons referred to in Article 1, paragraph 1, shall prepare the white paper in XHTML format and shall mark-up the fields prescribed in Annex II using the XBRL markup language.

2. The markups referred to in paragraph 1 shall be embedded in the white paper in XHTML format using the Inline XBRL 1.1 specifications and shall comply with the requirements on marking up and filing set out in Annex I.

3. Persons referred to in Article 1, paragraph 1, shall use a taxonomy in which the elements shall be those set out in Table 2, 3 or 4 of Annex II.

Article 3

Taxonomy files

ESMA may publish machine-readable and downloadable XBRL taxonomy files based on the taxonomy referred to in Article 2.

Article 4

Entry into force and application

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 apply from xx December xxxx.

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]

ANNEX I

FILING AND MARKING UP RULES

1. Persons referred to in Article 1, paragraph 1, shall submit the Inline XBRL instance document as a single XHTML file.

2. Persons referred to in Article 1, paragraph 1, shall identify themselves in the Inline XBRL instance document using a single ISO 17442 legal entity identifier on the XBRL context entity identifiers and schemes.

ANNEX II

Formats and disclosure templates for the crypto-asset white papers

Table 1

Legend for Tables 2, 3 and 4

SYMBOL	DATA TYPE	DEFINITION
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CFI_CODE}	6 characters	ISO 10962 CFI code .
{COUNTRYCODE_2}	2 alphanumerical characters	2 letter country code, as defined by ISO 3166-1 alpha-2 country code
{CURRENCYCODE_3}	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes

{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' – means that the letter 'T' shall be used; — 'hh' is the hour; — 'mm' is the minute; — 'ss.dddddd' is the second and its fraction of a second; — Z is UTC time. Dates and times shall be reported in UTC.
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted in the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. — decimal separator is '.' (full stop); — negative numbers are prefixed with '-' (minus); Values are rounded and not truncated.
{DTI}	9 alphanumerical characters	ISO 24165 DTI code
{INTEGER-n}	Integer number of up to n digits in total	Numerical field for both positive and negative integer values.

{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{LEI}	20 alphanumerical characters	Legal entity identifier as defined in ISO 17442
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383
{NATIONAL_ID}	35 alphanumerical characters	The identifier is derived in accordance with Article 6 and the Table of Annex II.
{TYPE_OF_WHITE_PAPER}	4 alphabetic characters	Choice from list of predefined values 'ARTW' 'EMTW' 'OTHR'

Table 2

**Disclosure templates for white papers for crypto-assets other than asset-referenced tokens or
e-money tokens**

N	FIELD	CONTENT TO BE REPORTED	FORMAT AND STANDARDS TO BE USED FOR REPORTING
I.00	Table of content	Table of content	Alphanumerical text
I.01	Date of notification	Date of notification	YYYY-MM-DD
I.02	Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114	'This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The offeror of the crypto-asset is solely responsible for the content of this crypto-asset white paper.' Where relevant in accordance with Article 6(3), second subparagraph of Regulation (EU) 2023/1114, reference shall be made to 'person seeking admission to trading' or to 'operator of the trading platform' instead of 'offeror'.	Predefined alphanumerical text
I.03	Compliance statement in accordance with	'This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 and, to the best of the	

		knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.'	Predefined alphanumerical text
I.04	Statement in accordance with Article 6(5), points (a), (b), (c) of Regulation (EU) 2023/1114	'The crypto-asset may lose its value in part or in full, may not always be transferable and may not be liquid.'	Predefined alphanumerical text
I.05	Statement in accordance with Article 6(5), point (d) of Regulation (EU) 2023/1114	[Include statement where the offer to the public concerns a utility token] 'The utility token may not be exchangeable against the good or service promised in the crypto-asset white paper, especially in the case of a failure or discontinuation of the crypto-asset project'	'true' – Yes 'false' – No If Yes, Predefined alphanumerical text
I.06	Statement in accordance with Article 6(5), points (e) and (f) of Regulation (EU) 2023/1114	'The crypto-asset is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council. The crypto-asset is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.'	Predefined alphanumerical text
SUMMARY			
I.07		'The summary should be read as an introduction to the crypto-asset white paper.	Predefined alphanumerical text

		Warning in accordance with Article 6(7), second subparagraph, of Regulation (EU) 2023/1114	The prospective holder should base any decision to purchase the asset-refenced token on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of the crypto-asset does not constitute an offer or solicitation to purchase financial instruments and any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law. The crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council (36) or any other offer document pursuant to Union or national law.'	
	I.08	Characteristics of the crypto-asset	A brief, clear and non-technical description of the characteristics of the crypto asset including information about rights and obligations of the purchaser, procedure and conditions for the exercise of those rights, conditions, if any, under which these rights and obligations may be modified. Where the white paper concerns a utility token, information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability.	Free alphanumerical text
	I.09	Key information about the offer to the public or admission to trading	A brief and non-technical description of the offer to the public including information about the amount of the offer, including, where applicable, any minimum and maximum target subscription goals, issue price of the crypto-asset and subscription fees, the total number of crypto-assets to be offered; prospective holders; description, where	Free alphanumerical text

| | | applicable, of the various phases of the offer to the public of crypto-assets, including information on discounted purchase price for early purchasers of crypto-assets, subscription period.

When applicable, the name of the crypto-asset service provider in charge of the placing of crypto-assets and the form of such placement (with or without a firm commitment basis);

When applicable, the name of the trading platform for which the admission is sought. | |
|---|---|---|---|
| **Part A - Information about the offeror or the person seeking admission to trading** | | | |
| A.1 | Name | Name | Free alphanumerical text |
| A.2 | Legal form | Legal form | ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)' |
| A.3 | Registered address | Registered address | Free alphanumerical text |
| A.4 | Head office | Head office, where different than registered address | Free alphanumerical text |
| A.5 | Registration Date | Date of the registration | ISO 8601 date format (YYYY-MM-DD) |
| A.6 | Legal entity identifier | Legal entity identifier | Legal entity identifier as defined in ISO 17442 |

A.7	Another identifier required pursuant to applicable national law	National identifier based on the nationality of the offeror or the person seeking admission to trading, if required under the applicable national law This field only applies to entities that are not eligible for a legal entity identifier and for which a national identifier is required under applicable national law	Predefined list of applicable national codes TBD based on feedback from NCAs
A.8	Contact telephone number	Contact telephone number of the offeror or the person seeking admission to trading	Free alphanumerical text
A.9	E-mail address	E-mail address of the offeror or the person seeking admission to trading	Free alphanumerical text
A.10	Response Time (Days)	Period of days within which an investor will receive an answer via that telephone number or email address	Numerical {INTEGER-3}
A.11	Parent Company	Where applicable, the name of the parent company	Legal entity identifier as defined in ISO 17442 or another identifier required pursuant to applicable national law
A.12	Members of the Management body	Identity (names or other identifiers), business address and functions of members of the management body of the offeror or the person seeking admission to trading	Free alphanumerical text
A.13	Business Activity	Business or professional activity of the offeror or person seeking admission to trading, including principal activities and principal markets	Free alphanumerical text

A.14	Parent Company Business Activity	Where applicable, business or professional activity of the parent company, including principal activities and principal markets	Free alphanumerical text
A.15	Newly Established	Indication as to whether the issuer has been established for the past three years	'true' – Yes 'false' – No
A.16	Recent financial condition	Financial condition of the offeror or person seeking admission to trading over the past three years. This shall be assessed based on a fair review of the development and performance of the business of the offeror or person seeking admission to trading and of its position for each year and interim period for which historical financial information is required, including the causes of material changes. The review shall be a balanced and comprehensive analysis of the development and performance of the business of the offeror or person seeking admission to trading and of its position, consistent with the size and complexity of the business. The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the business. The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the	Free alphanumerical text

		annual financial statements (where available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.	
A.17	Financial condition since registration	Where the offeror or person seeking admission to trading has not been established for the past three years, description of its financial condition since the date of its registration. This shall be assessed based on a fair review of the development and performance of the business of the offeror or person seeking admission to trading and of its position for each year and interim period for which historical financial information is available, including the causes of material changes. The review shall be a balanced and comprehensive analysis of the development and performance of the business of the offeror or person seeking admission to trading and of its position, consistent with the size and complexity of the business.	Free alphanumerical text

		The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the particular business. The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the annual financial statements (when available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.	
Part B - Information about the issuer, if different from the offeror or person seeking admission to trading
B.1	Name	Name	Free alphanumerical text
B.2	Legal form	Legal form	ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)'
B.3	Registered address	Registered address	Free alphanumerical text
B.4	Head office	Head office, where different than registered address	Free alphanumerical text

B.5	Registration Date	Date of the registration	ISO 8601 date format (YYYY-MM-DD)
B.6	Legal entity identifier	Legal entity identifier	Legal entity identifier as defined in ISO 17442
B.7	Another identifier required pursuant to applicable national law	National identifier based on the nationality of the issuer, if required under the applicable national law. This field only applies to entities that are not eligible for a legal entity identifier and for which a national identifier is required under applicable national law.	Predefined list of applicable national codes TBD based on feedback from NCAs
B.8	Parent Company	Where applicable, the name of the parent company	Legal entity identifier as defined in ISO 17442 or another identifier required pursuant to applicable national law
B.9	Members of the Management body	Identity, business address and functions of persons that are members of the management body of the issuer	Free alphanumerical text
B.10	Business Activity	Business or professional activity of the issuer, including principal activities, principal markets and recent financial condition.	Free alphanumerical text

B.11	Parent Company Business Activity	Where applicable, business or professional activity of the parent company, including principal activities and principal markets.	Free alphanumerical text
Part C - Information about the operator of the trading platform in cases where it draws up the crypto-asset white paper			
C.1	Name	Name	Free alphanumerical text
C.2	Legal form	Legal form	ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)'
C.3	Registered address	Registered address	Free alphanumerical text
C.4	Head office	Head office, where different than registered address	Free alphanumerical text
C.5	Registration Date	Date of the registration	ISO 8601 date format (YYYY-MM-DD)
C.6	Legal entity identifier	Legal entity identifier of the operator of the trading platform	Legal entity identifier as defined in ISO 17442
C.7	Another identifier required pursuant to applicable national law	National identifier based on the nationality of the issuer, if required under the applicable national law.	Predefined list of applicable national codes TBD based on feedback from NCAs

		This field only applies to entities that are not eligible for a legal entity identifier and for which a national identifier is required under applicable national law.	
C.8	Parent Company	Where applicable, the name of the parent company	Legal entity identifier as defined in ISO 17442 or another identifier required pursuant to applicable national law
C.9	Reason for Crypto-Asset White Paper Preparation	The reason why that operator drew up the crypto-asset white paper la	Free alphanumerical text
C.10	Members of the Management body	Identity, business address and functions of persons that are members of the management body of the operator of the trading platform	Free alphanumerical text
C.11	Operator Business Activity	Business or professional activity of the operator, including principal activities and principal markets.	Free alphanumerical text
C.12	Parent Company Business Activity	Where applicable, business or professional activity of the parent company, including principal activities and principal markets.	Free alphanumerical text
C.13	Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of	Where different from the offeror, person seeking admission to trading, issuer, operator of the trading platform, indication of the identity of the person drawing up the crypto-asset white paper	Free alphanumerical text

		Regulation (EU) 2023/1114	
C.14	Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114	Where the white paper is drawn up by a person different from the offeror, person seeking admission to trading, issuer, operator of the trading platform, reason for drawing up the white paper	Free alphanumerical text
Part D - Information about the crypto-asset project			
D.1	Crypto-asset project name	Name of the crypto-asset project, if different from the name of the offeror or person seeking admission to trading	Free alphanumerical text
D.2	Crypto-assets name	Name of the crypto-assets, if different from the name of the offeror or person seeking admission to trading	Free alphanumerical text
D.3	Abbreviation	Abbreviation or ticker handler	Free alphanumerical text
D.4	Crypto-asset project description	A brief description of the crypto-asset project	Free alphanumerical text
D.5	Details of all natural or legal persons involved in	Details of advisors, development team, crypto-assets service providers and other persons involved in the	Free alphanumerical text

		the implementation of the crypto-asset project	implementation of the crypto-asset project, including business addresses or domicile of the company	
D.6	Utility Token Classification	Indication as to whether the crypto-asset project concerns utility tokens	'true' – Yes 'false' – No
D.7	Key Features of Goods/Services for Utility Token Projects	Where applicable, key features of the goods or services to be developed for utility tokens crypto-asset projects	Free alphanumerical text
D.8	Plans for the token	Information about the crypto-asset project, including the description of the past and future milestones	Free alphanumerical text
D.9	Resource Allocation	Where applicable, information about resources already allocated to the project	Free alphanumerical text
D.10	Planned Use of Collected Funds or Crypto-Assets	Where applicable, planned use of any funds or other crypto-assets collected	Free alphanumerical text
Part E - Information about the offer to the public of crypto-assets or their admission to trading				
E.1	Public Offering and/or Admission to trading	Indication as to whether the crypto-asset white paper concerns an offer to the public of crypto-assets and/or their admission to trading	OTPC' - offer to the public 'ATTR' - admission to trading 'BOTH'

E.2	Reasons for Public Offer and/or Admission to trading	The reasons for the offer to the public and/or for seeking admission to trading, including what is the intended use of the funds raised with the offer	Free alphanumerical text
E.3	Fundraising Target	Where applicable, the amount that the offer to the public intends to raise in funds or in any other crypto-asset	Amount in monetary value {DECIMAL-18/5}
E.4	Minimum Subscription Goals	Where applicable, any minimum target subscription goals set for the offer to the public of the crypto-assets	Amount in monetary value {DECIMAL-18/5}
E.5	Maximum Subscription Goal	Where applicable, any maximum target subscription goals set for the offer to the public of the crypto-assets	Amount in monetary value {DECIMAL-18/5}
E.6	Oversubscription Acceptance	Indication whether oversubscriptions are accepted	'true'- Yes 'false' – No
E.7	Oversubscription Allocation	Where oversubscriptions are accepted, how they are allocated	Free alphanumerical text
E.8	Issue Price	The issue price of the crypto-asset being offered to the public (in an official currency or any other crypto-assets)	Amount in monetary value{DECIMAL-18/5}
E.9	Official currency or any other crypto-assets determining the issue price	The official currency or any other crypto-assets on the basis of which the issue price of the crypto asset is being offered to the public	ISO currency code or ISO 24165 DTI

E.10	Subscription fee	Any applicable subscription fee	Amount in monetary value{DECIMAL-18/5}
E.11	Offer Price Determination Method	Method in accordance with which the offer price will be determined	Free alphanumerical text
E.12	Total Number of Offered/Traded Crypto-Assets	Where applicable, the total number of crypto-assets to be offered to the public or admitted to trading	Numerical {INTEGER-n}
E.13	Targeted Holders	Indication of the prospective holders targeted by the offer to the public of the crypto-asset or admission of such crypto-asset to trading	'RTI' – retail investors 'PFI' – professional investors
E.14	Holder restrictions	Indication of any restriction as regards the type of holders for such crypto-asset	'RTI' – retail investors 'PFI' – professional investors
E.15	Reimbursement Notice	'Purchasers participating in the offer to the public of crypto-assets will be able to be reimbursed if the minimum target subscription goal is not reached at the end of the offer to the public, if they exercise the right to withdrawal foreseen in Article 13 of Regulation (EU) 2023/1114 or if the offer is cancelled'	predefined alphanumerical text
E.16	Refund Mechanism	Detailed description of the refund mechanism	Free alphanumerical text
E.17	Refund Timeline	Expected timeline of when such refunds will be completed	Free alphanumerical text

E.18	Offer Phases	Information about the various phases of the offer to the public of the crypto-asset	Free alphanumerical text
E.19	Early Purchase Discount	Information on discounted purchase price for early purchasers of the crypto-asset - (pre-public sales) and in the case of discounted purchase price for some purchasers, an explanation as to why the purchase prices may be different and a description of the impact on the other investors	Free alphanumerical text
E.20	Time-limited offer	Indication whether the offer is time-limited	'true'- Yes 'false' – No
E.21	Subscription period beginning	For time-limited offers, the beginning of the subscription period during which the offer to the public is open	ISO 8601 date format (YYYY-MM-DD)
E.22	Subscription period end	For time-limited offers, the end of the subscription period during which the offer to the public is open	ISO 8601 date format (YYYY-MM-DD)
E.23	Safeguarding Arrangements for Offered Funds/Crypto-Assets	The arrangements to safeguard funds or other crypto-assets as referred to in Article 10 of Regulation (EU) 2023/1114 during the time-limited offer to the public or during the withdrawal period	Free alphanumerical text
E.24	Payment Methods for Crypto-Asset Purchase	Methods of payment to purchase the crypto-assets	Free alphanumerical text

E.25	Value Transfer Methods for Reimbursement	Methods of transfer of the value to the purchasers when they are entitled to be reimbursed	Free alphanumerical text
E.26	Public Offers	Indication of offer to the public	'true' – Yes 'false' – No
E.27	Right of Withdrawal	In the case of offers to the public, information on the right of withdrawal as referred to in Article 13 of Regulation (EU) 2023/1114	Free alphanumerical text
E.28	Transfer of Purchased Crypto-Assets	Manner of transferring purchased crypto-assets to the holders	Free alphanumerical text
E.29	Transfer Time Schedule	Time schedule of transferring purchased crypto-assets to the holders	ISO 8601 date format(YYYY-MM-DD)
E.30	Purchaser's Technical Requirements	Information about technical requirements that the purchaser is required to fulfil to hold the crypto-assets	Free alphanumerical text
E.31	CASP name	Where applicable, the name of the crypto-asset service provider in charge of the placing of crypto-assets	Free alphanumerical text
E.32	Placement form	Where applicable, the form of such placement (with or without a firm commitment basis)	Free alphanumerical text
E.33	Trading Platforms	Where applicable, the name of the trading platforms for crypto-assets where admission to trading is sought	Free alphanumerical text

E.34	Trading Platforms Access	Where applicable, information about how investors can access such trading platforms and the costs involved	Free alphanumerical text
E.35	Involved costs	Where applicable, information about the costs involved	Free alphanumerical text
E.36	Offer Expenses	Expenses related to the offer to the public of crypto-assets	Amount in monetary value{DECIMAL-18/5}
E.37	Conflicts of Interest	Potential conflicts of interest of the persons involved in the offer to the public or admission to trading, arising in relation to the offer or admission to trading	Free alphanumerical text
E.38	Applicable law	The law applicable to the offer to the public of the crypto-asset	Free alphanumerical text
E.39	Competent court	Competent court	Free alphanumerical text
Part F - Information about the crypto-assets			
F.1	Crypto-Asset Type	The type of crypto-asset that will be offered to the public or for which admission to trading is sought	Free alphanumerical text
F.2	Crypto-Asset Characteristics	A description of the characteristics of the crypto-asset, including the data necessary for classification of the crypto-asset white paper in the register referred to in Article 109 of Regulation (EU) 2023/1114, as specified in accordance with paragraph 8 of that Article, and functionality of the crypto-assets being offered or admitted to trading,	ISO 24165 DTI code ISO 24165 FFG DTI Free alphanumerical text

		including information about when the functionalities are planned to apply.	
F.3	Crypto-Asset Functionality Description	A description of the functionality of the crypto-assets being offered or admitted to trading	Free alphanumerical text
F.4	Planned Application of Functionalities	Information about when the functionalities of the crypto-assets being offered or admitted to trading are planned to apply	Free alphanumerical text
Part G - Information on the rights and obligations attached to the crypto-assets			
G.1	Purchaser Rights and Obligations	A description of the rights and obligations, if any, of the purchaser	Free alphanumerical text
G.2	Exercise of Rights and obligation =	Procedure and conditions for the exercise of rights	Free alphanumerical text
G.3	Conditions for modifications of rights and obligations	Description of the conditions under which the rights and obligations may be modified	Free alphanumerical text
G.4	Future Public Offers	Where applicable, information on the future offers to the public of crypto-assets by the issuer	Free alphanumerical text
G.5	Issuer Retained Crypto-Assets	Where applicable, information on the number of crypto-assets retained by the issuer itself	Numerical {INTEGER-n}

G.6	Utility Token Classification	Indication as to whether the offer to the public of crypto-assets or their admission to trading concerns utility tokens	'true' – Yes 'false' – No
G.7	Key Features of Goods/Services of Utility Tokens	Information about the quality and quantity of goods or services to which the utility tokens give access	Free alphanumerical text
G.8	Utility Tokens Redemption	Where the offers to the public of crypto-assets or their admission to trading concerns utility tokens, information on how utility tokens can be redeemed for goods or services to which they relate	Free alphanumerical text
G.9	Non-Trading request	Indication as whether an admission to trading is sought	'true' – sought 'false' – not sought
G.10	Crypto-Assets purchase or sale modalities	Where an admission to trading is not sought, information on how and where the crypto-assets can be purchased or sold after the offer to the public	Free alphanumerical text
G.11	Crypto-Assets Transfer Restrictions	Restrictions on the transferability of the crypto-assets that are being offered or admitted to trading	Free alphanumerical text
G.12	Supply Adjustment Protocols	Indication as to whether the asset-referenced token has protocols for the increase or decrease of their supply in response to changes in demand	'true' – Yes 'false' – No

G.13	Supply Adjustment Mechanisms	Where the crypto-assets has protocols for the increase or decrease of their supply in response to changes in demand, a description of the functioning of such protocols	Free alphanumerical text
G.14	Token Value Protection Schemes	Where applicable, a description of protection schemes protecting the value of the crypto-assets	Free alphanumerical text
G.15	Compensation schemes	Where applicable, a description of compensation schemes	Free alphanumerical text
G.16	Applicable law	The law applicable to the crypto-assets	Free alphanumerical text
G.17	Competent court	Competent court	Free alphanumerical text
Part H – information on the underlying technology			
H.1	Distributed ledger technology	Information on the distributed ledger technology	Free alphanumerical text
H.2	Protocols and technical standards	Information about protocols and technical standards	Free alphanumerical text
H.3	Technology Used	Other information on the technology used allowing for the holding, storing and transfer of asset-referenced tokens, if relevant	Free alphanumerical text
H.4	Consensus Mechanism	The consensus mechanism, where applicable	Free alphanumerical text

H.5	Incentive Mechanisms and Applicable Fees	Incentive mechanisms to secure transactions and any fees applicable	Free alphanumerical text
H.6	Use of Distributed Ledger Technology	Indication as to whether the crypto-assets are issued, transferred and stored using distributed ledger technology that is operated by the issuer, the offeror or a third-party acting on their behalf	'true' – Yes 'false' – No
H.7	DLT Functionality Description	Detailed description of the functioning of such distributed ledger technology	Free alphanumerical text
H.8	Audit	Indication as to whether an audit of the technology used was conducted	'true' – Yes 'false' – No
H.9	Audit outcome	Information on the audit outcome of the technology used	Free alphanumerical text
Part I – Information on risks			
I.1	Offer-Related Risks	A description of the risks associated with the offer to the public of crypto-assets or their admission to trading	Free alphanumerical text
I.2	Issuer/Offeror/Admission Entity Differentiation	Indication as to whether the issuer is different from the offeror or person seeking admission to trading	'true' – Yes 'false' – No
I.3	Issuer-Related Risks	A description of the risks associated with the issuer, if different from the offeror or person seeking admission to trading, having regard to risks related to the issuer's	Free alphanumerical text

		financial situation, risks related to the issuer's business activities and industry, legal and regulatory risk, internal control risk, environmental, social and governance risks	
I.4	Crypto-Assets-related Risks	A description of the risks associated with the crypto-assets	Free alphanumerical text
I.5	Project Implementation-Related Risks	A description of the risks associated with project implementation	Free alphanumerical text
I.6	Technology-Related Risks	A description of the risks associated with the technology used	Free alphanumerical text
I.7	Mitigation measures	Mitigation measures of the risks associated with the technology, if any	Free alphanumerical text
Part J – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts			
J.1	Adverse impacts on climate and other environment-related adverse impacts	Include the information referred to in the Annex to Commission Delegated Regulation (XX) [Commission Delegated Regulation (EU) 2024/XXX supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying the content, methodologies and presentation of information in respect of sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts]	Free alphanumerical text

Table 3

Disclosure template for white papers for asset-referenced tokens

N	FIELD	CONTENT TO BE REPORTED	FORMAT AND STANDARDS
I.00	Table of content	Table of content	alphanumerical text
I.01	Date of notification	Date of notification	YYYY-MM-DD
I.02	Statement in accordance with Article Art.19(4), points (a), (b), (c), (d) and (e) of Regulation (EU) 2023/1114	'The asset-referenced token may lose its value in part or in full, may not always be transferable and may not be liquid. The asset-referenced token is not covered by the investor compensation schemes under Directive 97/9/EC. The crypto-asset is not covered by the deposit guarantee schemes under Directive 2014/49/EU.'	Predefined alphanumerical text
I.03	Compliance statement in accordance with Article 19(5) of Regulation (EU) 2023/1114	'This crypto-asset white paper complies with Title III of Regulation (EU) 2023/1114 and to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.'	Predefined alphanumerical text

		SUMMARY		
I.04	Warning in accordance with Article 19(6), second subparagraph, of Regulation (EU) 2023/1114	'The summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase the asset-refenced token on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of the crypto-asset does not constitute an offer or solicitation to purchase financial instruments and that any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law. The crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council (36) or any other offer document pursuant to Union or national law.'	Predefined alphanumerical text
I.05	Characteristics of the crypto-asset	A brief, clear and non-technical description of the characteristics of the asset-referenced token concerned in order to help prospective holders of that asset-referenced token make an informed decision	Free alphanumerical text
I.06	Right of redemption	'The holders of asset-referenced tokens have a right of redemption at any time' Description of the conditions for such redemption.	Predefined alphanumerical text

			Free alphanumerical text
I.07	Key information about the offer to the public and or admission to trading	Key information about the offer to the public of the asset-referenced token or the intended admission to trading of the asset-referenced token.	Free alphanumerical text
Part A – Information about the issuer of the asset-referenced token			
A.1	Name	Name	Free alphanumerical text
A.2	Legal form	Legal form	ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)'
A.3	Registered address	Registered address	Free alphanumerical text
A.4	Head office	Head office, where different than registered address	Free alphanumerical text
A.5	Registration Date	Date of the registration	ISO 8601 date format (YYYY-MM-DD)
A.6	Legal entity identifier	Legal entity identifier of the issuer	Legal entity identifier as defined in ISO 17442
A.7	Other identifier required pursuant to applicable national law	National identifier based on the nationality of the issuer, if required under the applicable national law.	Predefined list of applicable national codes

		This field only applies to entities that are not eligible for a legal entity identifier and for which a national identifier is required under applicable national law.	TBD based on feedback from NCAs
A.8	Parent Company	Where applicable, the identity of the parent company	Legal entity identifier as defined in ISO 17442 or another identifier required pursuant to applicable national law
A.9	Members of the Management body	Identity, business address and functions of persons (names or other identifiers) within the management body of the issuer	Free alphanumerical text
A.10	Business Activity	Business or professional activity of the issuer, including principal activities and principal markets	Free alphanumerical text
A.11	Parent Company Business Activity	Business or professional activity of the parent company (if applicable), including principal activities and principal markets	Free alphanumerical text
A.12	Newly Established	Indication as to whether the issuer has been established for the past three years	'true' – Yes 'false' – No
A.13	Financial condition for the past three years	Financial condition of the issuer over the past three years. This shall be assessed based on a fair review of the development and performance of the business of the issuer and of its position for each year and interim period	Free alphanumerical text

			for which historical financial information is required, including the causes of material changes. The review shall be a balanced and comprehensive analysis of the development and performance of the business of the issuer and of its position, consistent with the size and complexity of the business. The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the particular business. The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the annual financial statements (when available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.	
	A.14	Financial condition since registration	Where the issuer has not been established for the past three years, its financial condition since the date of its registration. This shall be assessed based on a fair review of the development and performance of the business of the	Free alphanumerical text

		issuer and of its position for each year and interim period for which historical financial information is required, including the causes of material changes.	
		The review shall be a balanced and comprehensive analysis of the development and performance of the business of the issuer and of its position, consistent with the size and complexity of the business.	
		The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the particular business.	
		The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the annual financial statements (when available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.	
A.15	Governance Arrangements	A detailed description of the issuer's governance arrangements	Free alphanumerical text

A.16	Exemption from authorisation	Indication of whether the issuer of asset-referenced tokens is exempted from authorisation in accordance with Article 17 of Regulation (EU) 2023/1114	'true' – Yes 'false' – No
A.17	Authorisation as issuer of Asset-referenced Token	If not exempted from authorisation, details about the authorisation as an issuer of an asset-referenced token	Free alphanumerical text
A.18	Authorisation Authority	Name of the competent authority that granted the authorisation as issuer of asset-referenced tokens	Closed list of competent authorities – one per Member State
A.19	Competent Authority for credit institutions	For credit institutions, name of the competent authority of the home Member State	Closed list of competent authorities – one per Member State
A.20	Issuance of other crypto-assets	Indication of whether the issuer of the asset-referenced token also issues other crypto-assets	'true' – Yes 'false' – No
A.21	Activities related to other crypto-assets	Indication of whether the issuer of the asset-referenced token also undertakes activities related to other crypto-assets.	'true' – Yes 'false' – No

A.22	Connection between the issuer and the entity running the DLT	Indication of whether there is any connection between the issuer and the entity running the distributed ledger technology used to issue the crypto-asset, including if the protocols are run or controlled by a person closely connected to the project participants	'true' – Yes 'false' – No
A.23	Description of the connection between the issuer and the entity running the DLT	Description of the connection between the issuer and entity running the distributed ledger technology used to issue the crypto-asset, including if the protocols are run or controlled by a person closely connected to the project participants	Free alphanumerical text
A.24	Persons other than the issuer offering to the public or seeking admission to trading of the asset referenced token according to Article 19(1), second subparagraph, of Regulation (EU) 2023/1114	Where different from the issuer, indication of the identity of the person offering to the public or seeking admission to trading of the asset referenced token	Free alphanumerical text
A.25	Reason for offering to the public or seeking admission to trading the asset-referenced token by persons referred to in	Where the offeror or the person seeking admission to trading is different from the issuer, reason for offering to the public or seeking admission to trading of the asset-referenced token	Free alphanumerical text

	Article 19(1), second subparagraph, of Regulation (EU) 2023/1114		
A.26	Other persons drawing up the crypto-asset white paper according to Article 19(1), second subparagraph, of Regulation (EU) 2023/1114	Where different from the issuer, indication of the identity of the person drawing up the crypto-asset white paper	Free alphanumerical text
A.27	Reason for drawing the white paper by persons referred to in Article 19(1), second subparagraph, of Regulation (EU) 2023/1114	Where the white paper is drawn up by a person different from the issuer, reason for drawing up the white paper	Free alphanumerical text
Part B - Information about the asset-referenced token			
B.1	Asset Token Name	Name of the asset-referenced token	Free alphanumerical text
B.2	Token Abbreviation	Abbreviation or ticker handler of the asset-referenced token	Free alphanumerical text

B.3	Description of the characteristics of the asset-referenced token	A description of the characteristics of the asset-referenced token, including the data necessary for classification of the crypto-asset white paper in the register referred to in Article 109 of Regulation (EU) 2023/1114, as specified in accordance with paragraph 8 of that Article	ISO 24165 DTI code ISO 24165 FFG DTI Free alphanumerical text
B.4	Details of all natural or legal persons involved in the implementation of the crypto-asset project	Details of advisors, development team, CASPs and others involved in the implementation of the crypto-asset project, including business addresses or domicile of the company	Free alphanumerical text
B.5	Third-Party Roles	A description of the role, responsibility and accountability of any third-party entities referred to in Article 34(5), first subparagraph, point (h) of Regulation (EU) 2023/1114	Free alphanumerical text
B.6	Plans for the Token	Information about the plans for the asset-referenced tokens, including description of past and future milestones	Free alphanumerical text
B.7	Resource Allocation	Where applicable, information about resources already allocated to the project	Free alphanumerical text
Part C - Information about the offer to the public of the asset-referenced token or its admission to trading			
C.1	Public Offering or admission to trading	Indication as to whether the crypto-asset white paper concerns an offer to the public of the asset-referenced token or its admission to trading	'OTPU' - offer to the public 'ADTT' - admission to trading

C.2	Fundraising Target	Where applicable, the amount that the offer to the public of the asset-referenced token intends to raise in funds or in any other crypto-asset	Amount in monetary value {DECIMAL-18/5}
C.3	Minimum Subscription Goals	Where applicable, any minimum target subscription goals set for the offer to the public of the asset-referenced token	Amount in monetary value {DECIMAL-18/5}
C.4	Maximum Subscription Goals	Where applicable, any maximum target subscription goals set for the offer to the public of the asset-referenced token	Amount in monetary value {DECIMAL-18/5}
C.5	Oversubscription Acceptance	Indication whether oversubscriptions are accepted	'true'- Yes 'false' – No
C.6	Oversubscription Allocation	Where oversubscriptions are accepted, description of how they are allocated	Free alphanumerical text
C.7	Token Offering/Trading Quantity	Where applicable, the total number of units of the asset-referenced token to be offered or admitted to trading	Numerical {DECIMAL-18/5}
C.8	Targeted Holders	Indication of the prospective holders targeted by the offer to the public of the asset-referenced token or admission of such asset-referenced token to trading	'RETI' – retail investors 'PROI' – professional investors
C.9	Holder restrictions	Indication of any restriction as regards the type of holders for such asset-referenced token	'RTI' – retail investors 'PFI' – professional investors
C.10	Reimbursement Notice	'Purchasers participating in the offer to the public of the asset-referenced token will be able to be reimbursed if the	predefined alphanumerical text

		minimum target subscription goal is not reached at the end of the offer to the public, if they exercise the right to withdrawal foreseen in Article 13 of Regulation (EU) 2023/1114 or if the offer is cancelled'	
C.11	Refund Timeline	Expected timeline of when such refunds will be completed	Free alphanumerical text
C.12	Explicit consequences	Description of the consequences of exceeding a maximum target subscription goal	Free alphanumerical text
C.13	Offer Phases	Information about the various phases of the offer to the public of the asset-referenced token	Free alphanumerical text
C.14	Early Purchase Discount	Information on discounted purchase price for early purchasers of the asset-referenced token (pre-public sales) and in the case of discounted purchase price for some purchasers, an explanation as to why the purchase prices may be different and a description of the impact on the other investors	Free alphanumerical text
C.15	Time-limited offer	Indication whether the offer is time-limited	'true'- Yes 'false' – No
C.16	Subscription period beginning	For time-limited offers, the beginning of the subscription period during which the offer to the public is open	ISO 8601 date format (YYYY-MM-DD)
C.17	Subscription period end	For time-limited offers, the end of the subscription period during which the offer to the public is open	ISO 8601 date format (YYYY-MM-DD)

C.18	Token Purchase/Redemption Payment	Methods of payment to purchase and to redeem the asset-referenced token offered	Free alphanumerical text
C.19	Token Transfer	Information on the method and time schedule of transferring the purchased asset-referenced token to the holders	Free alphanumerical text
C.20	Token Holding Prerequisites	Information about technical requirements that the purchaser is required to fulfil to hold the asset-referenced token	Free alphanumerical text
C.21	CASP name	Where applicable, the name of the crypto-asset service provider in charge of the placing of asset-referenced tokens	Free alphanumerical text
C.22	Placement form	Where applicable, the form of such placement (with or without a firm commitment basis)	Free alphanumerical text
C.23	Trading Platforms	Where applicable, the name of the trading platforms for crypto-assets where admission to trading is sought	Free alphanumerical text
C.24	Trading Platforms Access	Where applicable, information about how investors can access such trading platforms	Free alphanumerical text
C.25	Involved costs	Where applicable, information about the costs involved for accessing the trading platform	Numerical {DECIMAL-18/5}

C.26	Offer Expenses	Expenses related to the offer to the public of the asset-referenced token	Numerical {DECIMAL-18/5}
C.27	Conflicts of Interest	Potential conflicts of interest of the persons involved in the offer to the public or admission to trading, arising in relation to the offer or admission to trading	Free alphanumerical text
C.28	Applicable law	The law applicable to the offer to the public of the asset-referenced token	Free alphanumerical text
C.29	Competent court	Competent court	Free alphanumerical text
Part D - Information on the rights and obligations attached to the asset-referenced token			
D.1	Token Features	A description of the characteristics and functionality of the asset-referenced token being offered or admitted to trading	Free alphanumerical text
D.2	Planned Functional Use	Information about when the functionalities are planned to apply	ISO 8601 date format(YYYY-MM-DD)
D.3	Purchaser Rights & Obligations	A description of the rights and obligations, if any, of the purchaser	Free alphanumerical text
D.4	Rights Exercise Procedure	A description of the procedure and conditions for the exercise of those rights	Free alphanumerical text

D.5	Rights and Obligations Modification Conditions	A description of the conditions under which the rights and obligations may be modified	Free alphanumerical text
D.6	Future Public Offers	Where applicable, information on the future offers to the public of the asset-referenced token by the issuer	Free alphanumerical text
D.7	Issuer Retained Units	Where applicable, information on the number of units of the asset-referenced token retained by the issuer itself	Numerical {INTEGER-n}
D.8	Non-Trading Request	Indication as to whether an admission to trading is sought	'true' –sought 'false' – not sought
D.9	Token purchase or sale modalities	Where an admission to trading is not sought, information on how and where the asset-referenced token can be purchased or sold after the offer to the public	Free alphanumerical text
D.10	Token Transfer Restrictions	Any restrictions on the transferability of the asset-referenced token that is being offered or admitted to trading	Free alphanumerical text
D.11	Supply Adjustment Protocols	Indication as to whether the asset-referenced token has protocols for the increase or decrease of their supply in response to changes in demand	'true' – Yes 'false' – No
D.12	Supply Adjustment Mechanisms	Where the asset-referenced token has protocols for the increase or decrease of their supply in response to changes in demand, a description of the functioning of such protocols	Free alphanumerical text

D.13	Token Value Protection Schemes	Where applicable, a description of protection schemes protecting the value of the asset-referenced token	Free alphanumerical text
D.14	Compensation schemes	Where applicable, a description of compensation schemes	Free alphanumerical text
D.15	Nature and enforceability of rights	Information on the nature and enforceability of rights, including permanent rights of redemption and any claims that holders and any legal or natural person as referred to in Article 39(2) of Regulation (EU) 2023/1114, may have against the issuer, including information on how such rights will be treated in the case of insolvency procedures and whether different rights are allocated to different holders and the non-discriminatory reasons for such different treatment	Free alphanumerical text
D.16	Referenced assets description	Description of each referenced asset and specified proportions of each of those assets	Free alphanumerical text
D.17	Referenced assets proportions	Description of the amount of the claim and the reserve of asset	Free alphanumerical text
D.18	Value-Claim-Reserve Interrelation	Relation between the value of the referenced assets and the amount of the claim and the reserve of assets	Free alphanumerical text
D.19	Transparent Claim Valuation	Description how a fair and transparent valuation of components of the claim is undertaken, which identifies, where relevant, independent parties	Free alphanumerical text

D.20	Other details about the claim the asset referenced token represents over referenced assets	Additional details describing the claim that the asset-referenced token represents for the holders	Free alphanumerical text
D.21	Liquidity Arrangements	Where applicable, information on the arrangements put in place by the issuer to ensure the liquidity of the asset-referenced token	Free alphanumerical text
D.22	Liquidity Providers	Where applicable, the name of the entities in charge of ensuring such liquidity	Free alphanumerical text
D.23	Complaint Submission Contact	Contact details for submitting complaints	Free alphanumerical text
D.24	Complaints Handling Procedures	Description of the complaints-handling procedures	Free alphanumerical text
D.25	Dispute Resolution Mechanism	Description of any dispute resolution mechanism or redress procedure established by the issuer of the asset-referenced token	Free alphanumerical text
D.26	Holder Rights in Default or Insolvency	A description of the rights of the holders when the issuer is not able to fulfil its obligations, including in insolvency	Free alphanumerical text
D.27	Rights in Recovery Plan Implementation	A description of the rights in the context of the implementation of the recovery plan	Free alphanumerical text

D.28	Rights in Redemption Plan Implementation	A description of the rights in the context of the implementation of the redemption plan	Free alphanumerical text
D.29	Redemption Form	Detailed information on how the asset-referenced token is redeemed	Free alphanumerical text
D.30	Redemption Form Options	Indication whether the holder will be able to choose the form of redemption	'true' – Yes 'false' – No
D.31	Redemption Currency	Form of transference or the official currency of redemption	{CURRENCYCODE_3}
D.32	Applicable law	The law applicable to the asset-referenced token	Free alphanumerical text
D.33	Competent court	Competent court	Free alphanumerical text
Part E - Information on the underlying technology			
E.1	Distributed ledger technology	Information on the distributed ledger technology	Free alphanumerical text
E.2	Protocols and technical standards	Information on the protocols and technical standards used, allowing for the holding, storing and transfer of the asset-referenced token	Free alphanumerical text

E.3	Technology Used	Other information on the technology used allowing for the holding, storing and transfer of asset-referenced tokens, if relevant	Free alphanumerical text
E.4	Consensus Mechanism	The consensus mechanism, where applicable	Free alphanumerical text
E.5	Incentive Mechanisms and Applicable Fees	Incentive mechanisms to secure transactions and any fees applicable	Free alphanumerical text
E.6	Use of Distributed Ledger Technology	Indication as to whether the asset-referenced tokens are issued, transferred and stored using distributed ledger technology that is operated by the issuer or a third-party acting on the issuer's behalf	'true' – Yes, DLT operated by the issuer or a third-party acting on the issuer's behalf 'false' – No, DLT not operated by the issuer or a third-party acting on the issuer's behalf
E.7	DLT Functionality Description	If DLT operated by the issuer or a third party acting on the issuer's behalf, detailed description of the functioning of such distributed ledger technology	Free alphanumerical text
E.8	Audit	Indication as to whether an audit of the technology used was conducted	'true' – Yes 'false' – No
E.9	Audit outcome	If the audit was conducted, information on the audit outcome of the technology used	Free alphanumerical text
Part F - Information on the risks			

F.1	Risks related to Asset Reserve	The risks related to the reserve of assets, when the issuer is not able to fulfil its obligations	Free alphanumerical text
F.2	Issuer-Related Risks	A description of the risks associated with the issuer of the asset-referenced token, having regard to risks related to the issuer's financial situation, risks related to the issuer's business activities and industry, legal and regulatory risk, internal control risk, environmental, social and governance risks	Free alphanumerical text
F.3	Offer-Related Risks	A description of the risks associated with the offer to the public of the asset-referenced token or its admission to trading	Free alphanumerical text
F.4	Token-Related Risks	Description of the risks associated with the asset-referenced token, in particular with regard to the asset referenced	Free alphanumerical text
F.5	Risks related to operationalisation of the Asset-Referenced Token Project	A description of the risks associated with the operationalisation of the asset-referenced token project	Free alphanumerical text
F.6	Technology-Related Risks	Description of the risks associated with the technology used	Free alphanumerical text
F.7	Mitigation measures	Mitigation measures of the risks associated with the technology used, if any	Free alphanumerical text

		Part G - Information on the reserve of assets	
G.1	Value Alignment Mechanism	Detailed description of the mechanism aimed at aligning the value of the reserve of assets with the claim associated with the asset-referenced token, including legal and technical aspects	Free alphanumerical text
G.2	Asset Reserve Description	Detailed description of the reserve of assets and their composition	Free alphanumerical text
G.3	Token Issuance and Redemption Mechanisms	A description of the mechanisms through which asset-referenced tokens are issued and redeemed	Free alphanumerical text
G.4	Investment of Reserve of Assets	Information on whether a part of the reserve assets is invested	'true' – Yes 'false' – No
G.5	Reserve Asset Investment Policy	If a part of the reserve assets is invested, a description of the investment policy for the reserve assets	Free alphanumerical text
G.6	Reserve Asset Custody Arrangements	Description of the custody arrangements for the reserve assets, including their segregation	Free alphanumerical text
G.7	Custodian Service Providers	Name of crypto-asset service providers providing custody and administration of crypto-assets on behalf of clients, credit institutions, or investment firms appointed as custodians of the reserve assets	Free alphanumerical text

Table 4

Disclosure template for white papers for e-money tokens

N	FIELD	CONTENT TO BE REPORTED	FORMAT AND STANDARDS TO BE USED FOR REPORTING
I.00	Table of content	Table of content	alphanumerical text
I.01	Date of notification	Date of notification	YYYY-MM-DD
I.02	Statement in accordance with Article 51(3) of Regulation (EU) 2023/1114	'This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The issuer of the crypto-asset is solely responsible for the content of this crypto-asset white paper.'	Predefined alphanumerical text
I.03	Compliance statement in accordance with Article 51(5) of Regulation (EU) 2023/1114	'This crypto-asset white paper complies with Title IV of Regulation (EU) 2023/1114	

		and to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.'	Predefined alphanumerical text
I.04	Warning in accordance with Article 51(4), points (a) and (b) of Regulation (EU) 2023/1114	'This e-money token is not covered by the investor compensation schemes under Directive 97/9/EC. This e-money token is not covered by the deposit guarantee schemes under Directive 2014/49/EU.'	Predefined alphanumerical text
Summary			
I.05	Warning in accordance with Article 51(6), second subparagraph of Regulation (EU) 2023/1114s	'The summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase the asset-refenced token on the content of the crypto-asset	Predefined alphanumerical text

| | | white paper as a whole and not on the summary alone.

The offer to the public of the crypto-asset does not constitute an offer or solicitation to purchase financial instruments and that any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law.

The crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council (36) or any other offer document pursuant to Union or national law.' | |
| I.06 | Characteristics of the crypto-asset | A brief, clear and non-technical description of the characteristics of the crypto-assets concerned in order to help prospective holders of the crypto-asset make an informed decision | Free alphanumerical text |

I.07	Right of redemption	'The holders of the e-money token have a right of redemption at any time and at par value.' Description of the conditions for such redemption.	Predefined alphanumerical text Free alphanumerical text
I.08	Key information about the offer and or admission to trading	Key information about the offer to the public of the e-money token or the intended admission to trading of such e-money token.	Free alphanumerical text
Part A - Information about the issuer of the e-money token			
A.1	Name	Name	Free alphanumerical text
A.2	Legal form	Legal form	ISO standard 20275 'Financial Services – Entity Legal Forms (ELF)'
A.3	Registered address	Registered address	Free alphanumerical text
A.4	Head office	Head office, where different than registered address, as	Free alphanumerical text

			recorded in the GLEIF Database	
A.5	Registration Date		Date of the registration	ISO 8601 date format (YYYY-MM-DD)
A.6	Legal entity identifier		Legal entity identifier	Legal entity identifier as defined in ISO 17442
A.7	Other identifier required pursuant to applicable law		National identifier based on the nationality of the issuer, if required under the applicable national law.

This field only applies to entities that are not eligible for a legal entity identifier and for which a national identifier is required under applicable national law. | Predefined list of applicable national codes

TBD based on feedback from NCAs |
| A.8 | Contact telephone number | | Contact telephone number of the issuer | Free alphanumerical text |
| A.9 | E-mail address | | E-mail address of the issuer | Free alphanumerical text |

A.10	Response Time (Days)	Period of days within which an investor via that telephone number or email address will receive an answer	Numerical {INTEGER-3}
A.11	Parent Company	Where applicable, the identity of the parent company	Legal entity identifier as defined in ISO 17442 or another identifier required pursuant to applicable national law
A.12	Management	Identity, business address and functions of persons (names or other identifiers) within the management body of the issuer	Free alphanumerical text
A.13	Business Activity	Business or professional activity of the issuer, including principal activities and principal markets	Free alphanumerical text
A.14	Parent Company Business Activity	Business or professional activity of the parent company (if applicable), including principal activities and principal markets	Free alphanumerical text

A.15	Conflicts of Interest Disclosure	Potential conflicts of interest	Free alphanumerical text
A.16	Issuance of other crypto-assets	Indication of whether the issuer of the e-money token also issues other crypto-assets	'true' – Yes 'false' – No
A.17	Activities related to other crypto-assets	Indication of whether the issuer of the e-money token also has activities related to other crypto-assets.	'true' – Yes 'false' – No
A.18	Connection between the issuer and the entity running the DLT	Indication of whether there is any connection between the issuer and the entity running the distributed ledger technology used to issue the crypto-asset, including if the protocols are run or controlled by a person closely connected to the project participants	'true' – Yes 'false' – No
A.19	Description of the connection between the issuer and the entity running the DLT	Description of the connection between the issuer and entity running the distributed ledger	Free alphanumerical text

		technology used to issue the crypto-asset, including if the protocols are run or controlled by a person closely connected to the project participants	
A.20	Newly Established	Indication as to whether the issuer has been established for the past three years	'true' – Yes 'false' – No
A.21	Financial condition over the past three years	Financial condition of the issuer over the past three years. This shall be assessed based on a fair review of the development and performance of the business of the issuer and of its position for each year and interim period for which historical financial information is required, including the causes of material changes. The review shall be a balanced and comprehensive	Free alphanumerical text

		analysis of the development and performance of the business of the issuer and of its position, consistent with the size and complexity of the business.	
		The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the particular business.	
		The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the annual financial statements (when available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information	

		concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.		
A.22	Financial condition since registration	Where the issuer has not been established for the past three years, its financial condition since the date of its registration. This shall be assessed based on a fair review of the development and performance of the business of the issuer and of its position for each year and interim period for which historical financial information is required, including the causes of material changes. The review shall be a balanced and comprehensive	Free alphanumerical text	

		analysis of the development and performance of the business of the issuer and of its position, consistent with the size and complexity of the business.

The analysis shall include both financial and, where appropriate, non-financial Key Performance Indicators relevant to the particular business.

The analysis shall, where appropriate, include references to, and additional explanations of, amounts reported in the annual financial statements (when available), information regarding unusual or infrequent events or new developments, materially affecting the income from operations and indicate the extent to which income was so affected, information | |

		concerning capital resources (both short term and long term) and an explanation of the sources and amounts of and a narrative description of the cash flows.	
A.23	Exemption from authorisation	Indication of whether the issuer of e-money token is exempted from authorisation in accordance with Article 48(4) and (5) of Regulation (EU) 2023/1114	'true' – Yes 'false' – No
A.24	Asset Token Authorisation	If not exempted from authorisation, details about the authorisation as an issuer of an e-money token	Free alphanumerical text
A.25	Authorisation Authority	Name of the competent authority that granted the authorisation	Closed list of competent authorities – one per Member State
A.26	Persons other than the issuer offering to the public or seeking admission to trading of the e-money token according to Article 51(1), second subparagraph, of Regulation (EU) 2023/1114	Where different from the issuer, indication of the identity of the person offering to the public or seeking	Free alphanumerical text

		admission to trading of the e-money token	
A.27	Reason for offering to the public or seeking admission to trading of the e-money token by persons referred to in Article 51(1), second subparagraph, of Regulation (EU) 2023/1114	Where the offeror or the person seeking admission to trading is different from the issuer, reason for offering to the public or seeking admission to trading of the e-money token	Free alphanumerical text
	Part B - Information about the e-money token		
B.1	Name	e-token name	Free alphanumerical text
B.2	Abbreviation	e-token abbreviation	Free alphanumerical text
B.3	E-money token Characteristics	A description of the characteristics of the e-money token, including the data necessary for classification of the crypto-asset white paper in the register referred to in Article 109, as specified in accordance with paragraph 8 of that Article	ISO 24165 DTI ISO 24165 FFG DTI Free alphanumerical text

B.4	Details of all natural or legal persons involved in the implementation of the crypto-asset project	Details of advisors, development team, CASPs and others involved in the implementation of the crypto-asset project, including business addresses or domicile of the company	Free alphanumerical text
Part C - Information about the offer to the public of the e-money token or its admission to trading			
C.1	Public Offering or Trading	Indication as to whether the crypto-asset white paper concerns an offer to the public of the e-money token or an admission to its trading	'OTPC' – offer to the public 'ATTR' – admission to trading
C.2	Number of units	Where applicable, the total number of units of the e-money token to be offered to the public or admitted to trading	Numerical {DECIMAL-18/5}
C.3	Trading Platforms	Where applicable, the name of the trading platforms for crypto-assets where admission to trading is sought	Free alphanumerical text

C.4	Applicable law	The law applicable to the offer to the public of the e-money token	Free alphanumerical text
C.5	Competent court	Competent court	Free alphanumerical text
Part D - Information on the rights and obligations attached to e-money tokens			
D.1	Holder's rights and Obligations o	A detailed description of the rights and obligations, if any, that the holder of the e-money token has, including the right of redemption at par value as well as the procedure and conditions for the exercise of those rights	Free alphanumerical text
D.2	Rights and obligations modification	Description of the conditions under which the rights and obligations may be modified	Free alphanumerical text
D.3	Description of the rights of the holders	Description of the rights of the holders when the issuer is not able to fulfil its obligations, including in insolvency	Free alphanumerical text

D.4	Rights in implementation of recovery plan	Description of rights in the context of the implementation of the recovery plan	Free alphanumerical text
D.5	Rights in implementation of redemption plan	Description of the rights in the context of the implementation of the redemption plan	Free alphanumerical text
D.6	Complaint Submission Contact	Contact details for submitting complaints	Free alphanumerical text
D.7	Complaints Handling Procedures	Description of the complaints-handling procedures	Free alphanumerical text
D.8	Dispute Resolution Mechanism	Description of any dispute resolution mechanism or redress procedure established by the issuer of the e-money token	Free alphanumerical text
D.9	Token Value Protection Schemes	Where applicable, a description of protection schemes protecting the value of the crypto-asset and of compensation schemes	
D.10	Applicable law	The law applicable to the e-money token	Free alphanumerical text

D.11	Competent court	Competent court	Free alphanumerical text
Part E - Information on the underlying technology			
E.1	Distributed ledger technology	Information on the distributed ledger technology	Free alphanumerical text
E.2	Protocols and technical standards	Information on the protocols and technical standards used, allowing for the holding, storing and transfer of e-money token	Free alphanumerical text
E.3	Technology Used	Other information on the technology used allowing for the holding, storing and transfer of asset-referenced tokens, if relevant	Free alphanumerical text
E.4	Purchaser's technical requirements	Information about the technical requirements that the purchaser has to fulfil to gain control over the e-money token	Free alphanumerical text
E.5	Consensus Mechanism	The consensus mechanism, where applicable	Free alphanumerical text

E.6	Incentive Mechanisms and Applicable Fees	Incentive mechanisms to secure transactions and any fees applicable	Free alphanumerical text
E.7	Use of Distributed Ledger Technology	Indication as to whether the e-money tokens are issued, transferred and stored using distributed ledger technology that is operated by the issuer or a third-party acting on the issuer's behalf	'true' – Yes, DLT operated by the issuer or a third-party acting on the issuer's behalf 'false' – No, DLT not operated by the issuer or a third-party acting on the issuer's behalf
E.8	DLT Functionality Description	If DLT operated by the issuer or a third party acting on the issuer's behalf , detailed description of the functioning of such distributed ledger technology	Free alphanumerical text
E.9	Audit	Indication as to whether an audit of the technology used was conducted	'true' – Yes 'false' – No
E.10	Audit outcome	If an audit was conducted, information on the audit outcome of the technology used	Free alphanumerical text

		Part F - Information on the risks		
F.1	Issuer-Related Risks	A description of the risks associated with the issuer of the e-money token, having regard to: risks related to the issuer's financial situation, risks related to the issuer's business activities and industry, legal and regulatory risk, internal control risk; environmental, social and governance risks	Free alphanumerical text
F.2	Token-Related Risks	A description of the risks associated with the e-money token	Free alphanumerical text
F.3	Technology-Related Risks	Description of the risks associated with the technology used	Free alphanumerical text
F.4	Mitigation measures	Mitigation measures of the risks associated with the technology used, if any	Free alphanumerical text

Part G – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts		
Adverse impacts on climate and other environment-related adverse impacts	Include the information referred to in the Annex to Commission Delegated Regulation (XX) [Commission Delegated Regulation (EU) 2024/XXX supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying the content, methodologies and presentation of information in respect of sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts]	Free alphanumerical text

COMMISSION DELEGATED REGULATION (EU) …/…

of XXX

laying down implementing technical standards for the application of Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to the technical means for appropriate public disclosure of inside information and for delaying the public disclosure of inside information

(Text with EEA relevance)

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[85] , and in particular Article 88(4) third subparagraph thereof,

Whereas:

(1)   Public disclosure of inside information is essential to avoid insider dealing and ensure that investors are not misled. The protection of investors therefore requires timely public disclosure of inside information by issuers, offerors and persons seeking admission to trading.

(2)   Publication of inside information should reach as many investors as possible and be verifiable. The communication of the inside information to the media (dissemination) enables to reach a wide public. The publication of the same information on the websites of issuers, offerors and persons seeking admission to trading allows investors to confirm the reliability of the information disseminated. Therefore, issuers, offerors, and persons seeking admission to trading should comply with both publication on the website and dissemination to ensure effective and reliable disclosure.

(3)   To promote effective distribution of the inside information, issuers, offerors or persons seeking admission to trading should post all inside information that directly concerns them, on their website in the form of a written statement. The document containing the

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written statement should be downloadable to permit local storage and facilitate further dissemination of the inside information by third parties. The use of the written statement by third parties for publication at their own initiative should not replace the requirement for the issuer, offeror or person seeking admission to trading to communicate the information to the media which are reasonably relied upon by the public.

(4)   To facilitate access to information, the website should allow users to access the information on a non-discriminatory basis and free of charge and to locate the inside information in an easily identifiable dedicated section. Each publication should indicate date and time of the disclosure and publications should be organised in chronological order. Given the cross-border nature of crypto assets trading, issuers, offerors and person seeking admission to trading should publish information on their website either in the languages in which the crypto-asset white paper is drawn up and a language customary in the sphere of international finance or in a language customary in the sphere of international finance only. To facilitate the active distribution of inside information through the website of the issuer, the offeror or the person seeking admission to trading shall enable investors to receive push notifications or alerts on any new publication relating to inside information on opt-in basis.

(5)   Given the increasing importance of social media and web-based platforms in conveying information in relation to crypto assets, issuers, offerors and persons seeking admissions to trading, to disseminate inside information, they may also use social media or web-based platforms when they appear to be the media which are reasonably relied upon by the public.

(6)   To further facilitate access to the publication made directly by the issuer, the offeror or the person seeking admission to trading on their websites, the publication on social media or the web-based platforms should include a link to the page of such websites where the inside information was originally disclosed. Publication on social media and on web-based platforms should occur in line with the general requirements for dissemination, including access to information on a non-discriminatory basis. A non-discriminatory basis for disclosures in social media and web-based platforms should be understood to include only those platforms that are open to the public. While registration requirements from the media are acceptable, invitation-only media would not qualify as non-discriminatory.

(7)   To favour information centralisation, inside information relating to issuers or offerors whose crypto-assets are admitted to trading on a trading platform may be posted for dissemination purposes also on the website of the trading platform, when the trading platform provides this facility. To ensure consistency with the disclosure made by the issuer, the offeror or the person seeking admission to trading, the publication on the trading platforms website should include a link to the page of the website of the issuer, the offeror or the person seeking admission to trading where the information was originally disclosed.

(8)   It is important that the technical means for delaying the disclosure of inside information allow for the maintenance of the key information about the process for delaying the disclosure of inside information, so that issuers, offerors and persons seeking admission to trading are able to fulfil their obligation to notify the competent authorities.

(9)   The notification of the delay of the disclosure of inside information and, where required, the explanation of how all the applicable conditions for the delay were met should be provided to the competent authority in writing using secure electronic means specified by the same competent authority, thereby ensuring the integrity and confidentiality of the content of the information, as well as the rapidity of the transmission.

(10)   To enable the competent authority to identify the relevant persons within the issuer, the offeror or the person seeking admission to trading involved in the delay of disclosure of inside information, the notification of the delay should include the identity of the person who made the notification and of the person or persons responsible for the decision to delay the disclosure of inside information. Likewise, that notification should also indicate the temporal aspects of the delay enabling competent authorities to assess whether the conditions set out in Regulation (EU) 2023/1114 concerning the delay are met.

(11)   This Regulation is based on the draft implementing technical standards submitted to the Commission by the European Securities and Markets Authority (ESMA).

(12)   ESMA has conducted open public consultations on the draft implementing technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council[86] ,

HAS ADOPTED THIS REGULATION:

CHAPTER I

GENERAL PROVISIONS

Article 1

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[86] 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).

Definitions

For the purposes of this Regulation, the following definitions shall apply:

(a) 'alert' means a notification, provided via mail, message or pop-up, which enables a user to be made aware of publications regarding inside information and promotes a swift access to it;

(b) 'durable medium' means any instrument which enables the storage of information in a way that is accessible for future reference for a period of time adequate for the purposes of the information and allows the unchanged reproduction of the information stored;

(c) 'electronic means' are means of electronic equipment for the processing, storage and transmission of data;

(d) 'social media' means an "online social networking service" as defined in point (7) of Article 2 of Regulation (EU) 2022/1925 of the European Parliament and the Council[87] ;

(e) 'web-based platforms' means online platforms which collect and disseminate information and data on crypto-assets to promote informed investment decisions, accessible on a non-discriminatory basis and free of charge;

(f) 'trading platform for crypto assets' means one or more multilateral systems, which bring together or facilitate the bringing together of multiple third-party purchasing and selling interests in crypto-assets, in the system and in accordance with its rules, in a way that results in a contract, either by exchanging crypto-assets for funds or by the exchange of crypto-assets for other crypto-assets.

CHAPTER II

TECHNICAL MEANS FOR APPROPRIATE PUBLIC DISCLOSURE OF INSIDE INFORMATION

Article 2

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[87] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (OJ L 265, 12.10.2022, p. 1)

Posting of inside information on the website of the issuer, the offeror or the person seeking admission to trading

1. Issuers, offerors and persons seeking admission to trading for crypto-assets shall post the inside information on their website in the form of a downloadable written statement.

2. The website referred to in paragraph 1 shall comply with all of the following requirements:

    (a) allow users to access the inside information posted on the website in a non-discriminatory basis and free of charge;

    (b) allow users to locate the inside information in an easily identifiable section of the website;

    (c) ensure that the disclosed inside information clearly indicates date and time of disclosure and is organised in chronological order;

    (d) provide the inside information in the language in which the white-paper of the crypto-asset is drawn up and, where the white-paper is not drawn up in a language customary in the sphere of international finance, in a language customary in the sphere of international finance;

    (e) provide users with the possibility to receive alerts whenever inside information is published.

Article 3

Means for public disclosure of inside information

1. Issuers, offerors and persons seeking admission to trading for crypto-assets shall disclose inside information using technical means that ensure that inside information is disseminated:

    (a) to as wide a public as possible on a non-discriminatory basis;

    (b) free of charge; and

    (c) simultaneously throughout the Union.

2. To ensure effective dissemination, inside information shall be communicated, directly or through a third party, to the media which are reasonably relied upon by the public, including social media permitting publication in written form and web-based platforms which permit publication of news related to issuers, offerors or persons seeking admission to trading for crypto-assets. Inside information relating to crypto-assets admitted to trading on a trading platform for crypto-assets may be posted on the website of the trading platform for crypto

assets where the crypto-asset is traded, where the trading platform for crypto-assets provides this service.

3. Issuers, offerors and persons seeking admission to trading shall not disseminate inside information through social media or web-based platforms where the social media or web-based platform does not ensure that the inside information is accessible to all users or where the social media or web-based platform restricts access to users.

4. Publication on social media, web-based platforms, or on the website of the trading platform for crypto-assets for dissemination purposes shall include a link to the written statement published by the issuer, the offeror or the person seeking admission to trading on their websites pursuant to Article 2.

5. Communications for dissemination of inside information referred to in paragraph 2 shall be transmitted using electronic means that ensure that the completeness, integrity, and confidentiality of the information is maintained during the transmission, and they shall clearly identify:

   (a) that the information communicated is inside information;

   (b) the identity of the issuer, the offeror or the person seeking admission to trading (full legal name);

   (c) the identity of the person making the notification: name, surname, position within the issuer, the offeror or the person seeking admission to trading;

   (d) the subject matter of the inside information;

   (e) the date and time of the communication.

Issuers, offerors and persons seeking admission to trading shall ensure the completeness, integrity and confidentiality by remedying any failure or disruption in the communication of inside information without delay.

CHAPTER III

TECHNICAL MEANS FOR DELAYING THE PUBLIC DISCLOSURE OF INSIDE INFORMATION

Article 4

Notification of delayed disclosure of inside information and written explanation

1. For the purpose of delaying the public disclosure of inside information in accordance with Article 88(2) of Regulation (EU) 2023/1114, issuers, offerors and persons seeking admission to trading shall use technical means that ensure the accessibility, readability, and maintenance in a durable medium of all of the following information:

    (a) the dates and times when:

        (i) the inside information first existed within the issuer, the offeror or the person seeking admission to trading;

        (ii) the decision to delay the disclosure of inside information was made;

        (iii) the issuer, the offeror or the person seeking admission to trading is likely to disclose the inside information;

    (b) the identity of the persons within the issuer, the offeror or the person seeking admission to trading responsible for:

        (i) making the decision to delay the disclosure and deciding about the start of the delay and its likely end;

        (ii) ensuring the on-going monitoring of the conditions for the delay;

        (iii) deciding about the public disclosure of the inside information;

        (iv) providing the requested information about the delay and the written explanation to the competent authority;

    (c) evidence of the initial fulfilment of the conditions referred to in Article 88(2) of Regulation (EU) 2023/1114, and of any change in this fulfilment during the delay period, including:

        (i) the information barriers which have been put in place internally and with regard to third parties to prevent access to inside information by persons other than those who require it for the normal exercise of their employment, profession or duties within the issuer, the offeror or the person seeking admission to trading;

        (ii) the arrangements put in place in cases where the confidentiality is no longer ensured.

2. Issuers, offerors and persons seeking admission to trading shall transmit to the competent authority a written notification of delay in the disclosure of inside information and a written explanation of such delay through a dedicated contact point within, or designated by, the competent authority, and using electronic means specified by the competent authority.

Competent authorities shall publish on their website the dedicated contact point within, or designed by, the competent authority and the electronic means referred to in the first subparagraph. Those electronic means shall ensure that completeness, integrity and confidentiality of the information are maintained during the transmission.

3. The electronic means referred to in paragraph 2 shall ensure that the notification of a delay in the disclosure of inside information includes the following information:

   (a) the identity of the issuer, the offeror or the person seeking admission to trading: full legal name;

   (b) the identity of the person making the notification: name, surname, position within the issuer, the offeror or the person seeking admission to trading;

   (c) the contact details of the person making the notification: professional email address and phone number;

   (d) identification of the publicly disclosed inside information that was subject to delayed disclosure: title of the disclosure statement; the reference number, where the dissemination system used assigns one; date and time of the public disclosure of the inside information;

   (e) date and time of the decision to delay the disclosure of inside information;

   (f) the identity of all persons responsible for the decision of delaying the public disclosure of inside information.

4. Where the written explanation of a delay in the disclosure of inside information is provided only upon request of the competent authority in accordance with Article 88(3) of Regulation (EU) 2023/1114, the electronic means referred to in paragraph 2 shall ensure that such written explanation includes the information referred to in paragraph 3.

CHAPTER IV

FINAL PROVISIONS

Article 6

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]