

# **White paper drafted under the European Markets in Crypto- Assets Regulation (EU) 2023/1114 for FFG BJD0TZ8V1**

# Preamble

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## 01. Date of notification

This white paper was notified at 2025-12-03.

## 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 person seeking admission to trading of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

## 03. Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114

This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 of the European Parliament and of the Council 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.

## 04. Statement in accordance with Article 6(5), points (a), (b), (c), of Regulation (EU) 2023/1114

The crypto-asset referred to in this crypto-asset white paper may lose its value in part or in full, may not always be transferable and may not be liquid.

## 05. Statement in accordance with Article 6(5), point (d), of Regulation (EU) 2023/1114

As defined in Article 3(9) of Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets – amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 – a utility token is “a type of crypto-asset that is only intended to provide access to a good

or a service supplied by its issuer". This crypto-asset does not qualify as a utility token, as its intended use goes beyond providing access to a good or service supplied solely by the issuer.

## **06. Statement in accordance with Article 6(5), points (e) and (f), of Regulation (EU) 2023/1114**

The crypto-asset referred to in this white paper is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council or the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

### **Summary**

## **07. Warning in accordance with Article 6(7), second subparagraph, of Regulation (EU) 2023/1114**

Warning:

This summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase this crypto-asset on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of this 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. This 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 or any other offer document pursuant to Union or national law.

## **08. Characteristics of the crypto-asset**

The crypto-asset Worldcoin (WLD) referred to in this white paper is a crypto-asset other than EMTs and ARTs, and is issued on the Ethereum and Optimism networks as of 2025-

10-30 and according to DTI FFG shown in F.14. The supply of the crypto-asset is limited to 10,000,000,000 units. The first activity on Ethereum can be viewed on 2023-07-17 (transaction

hash:

0xe884a49cc0bad8a49bb6149dd7c1857a1714045af7b23e072b4642826668984b,

source

<https://etherscan.io/tx/0xe884a49cc0bad8a49bb6149dd7c1857a1714045af7b23e072b>

4642826668984b, accessed 2025-10-30) and on 2023-07-19 on Optimism (transaction

hash: 0x0c315881a1038e4300c2dbe0e0745edebfc21a59128e8800ae6d2b90fcc38f00,

source:

<https://optimistic.etherscan.io/tx/0x0c315881a1038e4300c2dbe0e0745edebfc21a5912>

8e8800ae6d2b90fcc38f00, accessed 2025-10-30)

The World Foundation, established as a foundation company limited by guarantee in the Cayman Islands, oversees certain governance and ecosystem-related aspects of the Worldcoin project. WLD is designed as a transferable digital unit that can be held and transacted on the supported networks. Individuals generally obtain WLD through mechanisms made publicly available by the project, which may include distributions, grants, or allocations linked to participation in the wider Worldcoin ecosystem.

The Worldcoin protocol incorporates an optional identity-verification system known as World ID, which enables users to prove that they are a unique human participant without revealing their personal identity. In regions where the system is available, individuals who choose to verify their uniqueness through this mechanism may become eligible, subject to programme conditions, to receive periodic distributions of WLD.

No redemption rights, repayment claims, or rights to underlying assets exist. Features associated with WLD may evolve if governance processes within the Worldcoin ecosystem introduce changes, subject to the relevant decision-making procedures.

No automatic rebasing, enforced burning, or protocol-level supply adjustments apply. The continuation of the crypto-asset's features depends on the ongoing operation of the underlying networks and the applications that support WLD.

## 09. Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability

As defined in Article 3(9) of Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets – amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 – a utility token is “a type of crypto-asset that is only intended to provide access to a good or a service supplied by its issuer”. This crypto-asset does not qualify as a utility token, as its intended use goes beyond providing access to a good or service supplied solely by the issuer.

## 10. Key information about the offer to the public or admission to trading

Crypto Risk Metrics GmbH is seeking admission to trading on Payward Global Solutions LTD ("Kraken") platform in the European Union in accordance with Article 5 of 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. The admission to trading is not accompanied by a public offer of the crypto-asset.

### Part A – Information about the offeror or the person seeking admission to trading

#### A.1 Name

Crypto Risk Metrics GmbH is the person seeking admission to trading.

#### A.2 Legal form

The legal form of Crypto Risk Metrics GmbH is 2HBR, which corresponds to "Gesellschaft mit beschränkter Haftung".

**A.3 Registered address**

The registered address of Crypto Risk Metrics GmbH is DE-HH, Lange Reihe 73, 20099 Hamburg, Germany.

**A.4 Head office**

Crypto Risk Metrics GmbH has no head office.

**A.5 Registration date**

Crypto Risk Metrics GmbH was registered on 2018-12-03.

**A.6 Legal entity identifier**

The Legal Entity Identifier (LEI) of Crypto Risk Metrics GmbH is 39120077M9TG0O1FE242.

**A.7 Another identifier required pursuant to applicable national law**

The national identifier of Crypto Risk Metrics GmbH is HRB 154488.

**A.8 Contact telephone number**

+4915144974120

**A.9 E-mail address**

info@crypto-risk-metrics.com

**A.10 Response time (Days)**

Crypto Risk Metrics GmbH will respond to investor enquiries within 30 calendar days.

**A.11 Parent company**

Crypto Risk Metrics GmbH has no parent company.

**A.12 Members of the management body**

Identity	Function	Business Address
Tim Zöllitz	Chairman	Lange Reihe 73, 20099

		Hamburg, Germany
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#### **A.13 Business activity**

Crypto Risk Metrics GmbH is a technical service provider, which supports regulated entities in the fulfilment of their regulatory requirements. In this regard, Crypto Risk Metrics GmbH, among other services, acts as a data-provider for ESG data according to article 66 (5). Due to the regulations laid out in article 4 (7), 5 (4) and 66 (3) of the 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, Crypto Risk Metrics GmbH aims to provide central services for crypto-asset white papers.

#### **A.14 Parent company business activity**

Crypto Risk Metrics GmbH does not have a parent company. Accordingly, no business activity of a parent company is to be reported in this section.

#### **A.15 Newly established**

Crypto Risk Metrics GmbH has been established since 2018-12-03 and is therefore not newly established (i. e. more than three years).

#### **A.16 Financial condition for the past three years**

Crypto Risk Metrics GmbH, founded in 2018 and based in Hamburg (HRB 154488), has undergone several strategic shifts in its business focus since incorporation. Due to these changes in business model and operational direction over time, the financial figures from earlier years are only comparable to a limited extent with the company's current commercial activities. The present business model – centred around regulatory technology and risk analytics in the context of the MiCAR framework – has been established progressively and can be realistically considered fully operational since approximately 2024.

The company's financial trajectory over the past three years reflects the transition from exploratory development toward market-ready product delivery. The profit and loss after tax for the last three financial years is as follows:

2024 (unaudited): negative EUR 50.891,81

2023 (unaudited): negative EUR 27.665,32

2022: EUR 104.283,00.

The profit in 2022 resulted primarily from legacy consulting activities, which were discontinued in the course of the company's repositioning.

The losses in 2023 and 2024 result from strategic investments in the development of proprietary software infrastructure, regulatory frameworks, and compliance technology for the MiCAR ecosystem. During those periods, no substantial commercial revenues were expected, as resources were directed toward preparing the platform for regulated market entry.

A fundamental repositioning of the company occurred in 2023 and especially in 2024, when the focus shifted toward providing risk management, regulatory reporting, and supervisory compliance solutions for financial institutions and crypto-asset service providers. This marked a material shift in business operations and monetisation strategy.

Based on the current business development in Q4 2025, revenues exceeding EUR 550,000 are expected for the fiscal year 2025, with an anticipated net profit of approximately EUR 100,000. These figures are neither audited nor based on a finalized annual financial statement; they are derived from the company's current pipeline, client development, and active commercial engagements. Accordingly, they are subject to future risks and market fluctuations.

With the regulatory environment now taking shape and the platform commercially validated, it is assumed that the effects of the strategic developments will continue to materialize in 2026. The company foresees further scalability of its technology and growing market demand for regulatory compliance tools in the European crypto-asset sector.

No public subsidies or governmental grants have been received to date; all operations have been financed through shareholder contributions and internally generated

resources. Crypto Risk Metrics has never accepted any payments via Tokens from projects it has worked for and – due to the internal Conflicts of Interest Policy – never will.

#### **A.17 Financial condition since registration**

Not applicable. The company has been established for more than three years and its financial condition over the past three years is provided in Part A.16 above.

### **Part B – Information about the issuer, if different from the offeror or person seeking admission to trading**

#### **B.1 Issuer different from offeror or person seeking admission to trading**

Yes, the issuer is different from the person seeking admission to trading.

#### **B.2 Name**

According to the official Worldcoin whitepaper (<https://whitepaper.world.org/>, accessed 2025-10-30), the issuer of the WLD crypto-asset is World Assets Ltd. (BVI), acting under the control and for the benefit of its sole member, Worldcoin Foundation (Cayman Islands), which governs and administers the World project and the WLD token's allocation.

#### **B.3 Legal form**

The legal form of World Foundation is K575, which corresponds to "Foundation Company".

#### **B.4. Registered address**

KY - Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman KY1-9006, Cayman Islands

#### **B.5 Head office**

The head office of World Foundation is the same as its registered address.

#### **B.6 Registration date**

World Foundation was registered on 2022-10-31.

#### **B.7 Legal entity identifier**

World Foundation has no Legal Entity Identifier (LEI).

#### **B.8 Another identifier required pursuant to applicable national law**

World Foundation has no national identifier.

#### **B.9 Parent company**

No parent company of World Foundation can be identified.

#### **B.10 Members of the management body**

Name	Position	Business Address
Chris "W" Waclawek	World Foundation Director	KY, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman KY1-9006, Cayman Islands
Phillip Sippl	World Foundation Director	KY, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman KY1-9006, Cayman Islands
Weinberger Ventures GmbH (acting through its sole director Pascal Weinberger)	World Foundation Director	KY, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman KY1-9006, Cayman Islands
Unidentified professional director (Cayman Islands based)	World Foundation Director	KY, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman KY1-

		9006, Cayman Islands
Sources	World Whitepaper ( <a href="https://whitepaper.world.org">https://whitepaper.world.org</a> , accessed 2025-10-30); Amended and Restated Articles of Association of World Foundation (filed 12 Feb 2025, File #395097)	Not applicable.

#### **B.11 Business activity**

The World Foundation is a memberless, non-profit foundation company. Activities include holding and administering protocol assets; managing and licensing ecosystem IP; supporting issuance of World ID credentials; allocating WLD community tokens; setting standards for Orb provisioning; and operating grants and ecosystem support programs.

#### **B.12 Parent company business activity**

Not applicable.

### **Part C – Information about the operator of the trading platform in cases where it draws up the crypto-asset white paper and information about other persons drawing the crypto-asset white paper pursuant to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114**

#### **C.1 Name**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

#### **C.2 Legal form**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.3 Registered address**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.4 Head office**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.5 Registration date**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.6 Legal entity identifier**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.7 Another identifier required pursuant to applicable national law**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.8 Parent company**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.9 Reason for crypto-Asset white paper Preparation**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.10 Members of the Management body**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.11 Operator business activity**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.12 Parent company business activity**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.13 Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**C.14 Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114**

Not applicable since Crypto Risk Metrics GmbH is not a trading platform.

**Part D – Information about the crypto-asset project****D.1 Crypto-asset project name**

Long Name: "Worldcoin", Short Name: "WLD" according to the Digital Token Identifier Foundation ([www.dtif.org](http://www.dtif.org), DTI see F.13, FFG DTI see F.14 as of 2025-10-30).

**D.2 Crypto-assets name**

Long Name: "Worldcoin" according to the Digital Token Identifier Foundation ([www.dtif.org](http://www.dtif.org), DTI see F.13, FFG DTI see F.14 as of 2025-10-30).

**D.3 Abbreviation**

Short Name: "WLD" according to the Digital Token Identifier Foundation ([www.dtif.org](http://www.dtif.org), DTI see F.13, FFG DTI see F.14 as of 2025-10-30).

**D.4 Crypto-asset project description**

According to the Worldcoin whitepaper (<https://whitepaper.world.org/>, accessed 2025-10-30), Worldcoin is a decentralized identity and financial network designed to establish a universal digital identity and enable global participation in the digital economy. The protocol operates around three main components: World ID, a privacy-preserving identity layer based on biometric verification; World App, a wallet application enabling users to authenticate and transact; and WLD, the native crypto-asset of the ecosystem.

The WLD token constitutes the governance and incentive unit of the Worldcoin protocol. While governance functionality has been announced within the protocol's design, it has not yet been activated or implemented at the time of drafting. The token is primarily distributed to verified users and ecosystem contributors to foster adoption and align participation incentives. WLD does not represent ownership, equity, or redemption rights, and its use is limited to governance participation and transferability on compatible blockchain infrastructure.

**D.5 Details of all natural or legal persons involved in the implementation of the crypto-asset project**

Name	Position	Business Address
Sam Altman	Co-founder of Worldcoin	Could not be identified.
Alex Blania	Co-founder of Worldcoin	Could not be identified.
Worldcoin Foundation	Operating entity associated with the project	KY-KY1-9006, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman, Cayman Islands
World Assets Ltd.	BVI Company Number 2113558, Registered in Tortola, British Virgin Islands; associated with the project	Could not be identified.
Chris "W" Waclawek	Director of World Foundation	KY-KY1-9006, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman, Cayman Islands
Phillip Sippl	Director of World Foundation	KY-KY1-9006, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman, Cayman Islands
Weinberger Ventures GmbH (acting through Pascal Weinberger)	Director of World Foundation	KY-KY1-9006, Suite 3119, 9 Forum Lane, Camana Bay, George Town, Grand Cayman, Cayman Islands

Info	Sources: World Whitepaper ( <a href="https://whitepaper.world.org">https://whitepaper.world.org</a> , accessed 2025-10-30); Amended and Restated Articles of Association of World Foundation (dated 2025-02-11, filed 12-Feb-2025 Cayman Registrar File #395097)	Not applicable.
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#### **D.6 Utility Token Classification**

As defined in Article 3(9) of Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets – amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 – a utility token is “a type of crypto-asset that is only intended to provide access to a good or a service supplied by its issuer”. This crypto-asset does not qualify as a utility token, as its intended use goes beyond providing access to a good or service supplied solely by the issuer.

#### **D.7 Key Features of Goods/Services for Utility Token Projects**

As defined in Article 3(9) of Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets – amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 – a utility token is “a type of crypto-asset that is only intended to provide access to a good or a service supplied by its issuer”. This crypto-asset does not qualify as a utility token, as its intended use goes beyond providing access to a good or service supplied solely by the issuer.

#### **D.8 Plans for the token**

This section provides an overview of the historical developments related to the WLD token and a description of planned or anticipated project milestones as publicly

communicated. All forward-looking elements are subject to significant uncertainty. They do not constitute commitments, assurances, or guarantees, and may be modified, delayed, or discontinued at any time. The implementation of past milestones cannot be assumed, and future changes may have adverse effects for token holders.

According to the official whitepaper (<https://whitepaper.world.org/>, accessed 2025-10-30), no formally published fixed roadmap exists for the WLD token.

Governance of the WLD token is currently centralized under Worldcoin Foundation but intended to be progressively decentralized to the community.

Any potential inflation of the WLD supply beyond the initial 10 billion tokens can only commence, at the earliest, 15 years after launch (specifically on 2038-07-24). The decision to activate inflation, which is currently set to 0 %, is subject to a future governance decision, and any such inflation is contractually capped at a maximum rate of 1.5 % per year.

These objectives remain subject to technical execution and governance approval, and no assurance can be given that all milestones will be achieved as currently described. As a result, there can be no assurance that future plans will enhance or support the token, nor that they will not have adverse consequences for holders.

#### **D.9 Resource allocation**

According to the official whitepaper (<https://whitepaper.world.org/>, accessed 2025-10-30) the total supply of the WLD token amounts to 10,000,000,000 WLD. The published allocation framework divides this supply across four major categories designed to support users, contributors, investors, and network operations as follows:

- 75 % (7,500,000,000 WLD) to the World Community, governed by the World Foundation in line with its Articles of Association and mandate to decentralize token governance. These tokens are allocated mainly to users (claimable over time) and partly to the ecosystem fund and network operations.
- 11.1 % (1,110,000,000 WLD) to the Team. Tokens are subject to lock-ups and vesting schedules.

- 13.6 % (1,360,000,000 WLD) to Tools for Humanity (TFH) Investors. These tokens are also subject to lock-ups and gradual unlocking.
- 0.3 % (30,000,000 WLD) to the TFH Reserve, held for future needs of TFH and subject to a one-year lock-up followed by two years of linear unlock.

The temporary token distribution can be traced on-chain, on Ethereum:  
<https://etherscan.io/token/0x163f8c2467924be0ae7b5347228cabf260318753#balances>

The temporary token distribution can be traced on-chain, on Optimism:  
<https://optimistic.etherscan.io/token/0xdc6ff44d5d932cbd77b52e5612ba0529dc6226f1#balances>

The investor must be aware that a public address cannot necessarily be assigned to a single person or entity, which limits the ability to determine exact economic influence or future actions. Token distribution changes can negatively impact the investor.

#### **D.10 Planned use of Collected funds or crypto-Assets**

Not applicable, as this white paper serves the purpose of admission to trading and is not associated with any fundraising activity for the crypto-asset project.

### **Part E – Information about the offer to the public of crypto-assets or their admission to trading**

#### **E.1 Public offering or admission to trading**

The white paper concerns the admission to trading (i. e. ATTR).

#### **E.2 Reasons for public offer or admission to trading**

The purpose of seeking admission to trading is to enable the crypto-asset to be listed on a regulated platform in accordance with the applicable provisions of Regulation (EU) 2023/1114 and Commission Implementing Regulation (EU) 2024/2984. The white paper has been drawn up to comply with the transparency requirements applicable to trading venues. No funds or crypto-assets are collected in connection with this admission.

**E.3 Fundraising target**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.4 Minimum subscription goals**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.5 Maximum subscription goals**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.6 Oversubscription acceptance**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.7 Oversubscription allocation**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.8 Issue price**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.9 Official currency or any other crypto-assets determining the issue price**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.10 Subscription fee**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **E.11 Offer price determination method**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **E.12 Total number of offered/traded crypto-assets**

The total supply of the crypto-asset is, according to the the crypto-asset project (<https://whitepaper.world.org/#the-wld-token>, accessed 2025-10-30) set at 10,000,000,000 units. Investors should note that changes in the token supply can have a negative impact. The effective amount of tokens available on the market depends on the number of tokens released by the issuer or other parties at any given time, as well as potential reductions through token "burning." As a result, the circulating supply may differ from the total supply.

### **E.13 Targeted holders**

The admission of the crypto-asset to trading is open to all types of investors.

### **E.14 Holder restrictions**

Holder restrictions are subject to the rules applicable to the crypto-asset service provider, as well as to any additional restrictions such provider may impose.

### **E.15 Reimbursement notice**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **E.16 Refund mechanism**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **E.17 Refund timeline**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.18 Offer phases**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.19 Early purchase discount**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.20 Time-limited offer**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.21 Subscription period beginning**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.22 Subscription period end**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.23 Safeguarding arrangements for offered funds/crypto- Assets**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.24 Payment methods for crypto-asset purchase**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.25 Value transfer methods for reimbursement**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.26 Right of withdrawal**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.27 Transfer of purchased crypto-assets**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.28 Transfer time schedule**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.29 Purchaser's technical requirements**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.30 Crypto-asset service provider (CASP) name**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.31 CASP identifier**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.32 Placement form**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

**E.33 Trading platforms name**

The admission to trading is sought on Payward Global Solutions LTD ("Kraken").

**E.34 Trading platforms Market identifier code (MIC)**

The Market Identifier Code (MIC) of Payward Global Solutions LTD ("Kraken") is PGSL.

### **E.35 Trading platforms access**

The token is expected to be listed on the trading platform operated by Payward Global Solutions LTD ("Kraken"). Access to this platform depends on regional availability and user eligibility under Kraken's terms and conditions. Investors should consult Kraken's official documentation to determine whether they meet the requirements for account creation and token trading.

### **E.36 Involved costs**

The costs involved in accessing the trading platform depend on the specific fee structure and terms of the respective crypto-asset service provider. These may include trading fees, deposit or withdrawal charges, and network-related gas fees. Investors are advised to consult the applicable fee schedule of the chosen platform before engaging in trading activities.

### **E.37 Offer expenses**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **E.38 Conflicts of interest**

MiCAR-compliant crypto-asset service providers shall have strong measures in place in order to manage conflicts of interests. Due to the broad audience this white paper is addressing, potential investors should always check the conflicts-of-interest policy of their respective counterparty.

Crypto Risk Metrics GmbH maintains a comprehensive conflict-of-interest policy. On this basis, potential conflicts of interest on the side of Crypto Risk Metrics GmbH can be excluded for the purposes of this assessment.

### **E.39 Applicable law**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

#### **E.40 Competent court**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

### **Part F – Information about the crypto-assets**

#### **F.1 Crypto-asset type**

The crypto-asset described in the white paper is classified as a crypto-asset under the Markets in Crypto-Assets Regulation (MiCA) but is neither classified as an electronic money token (EMT) or an asset-referenced token (ART).

It is a digital representation of value that can be stored and transferred using distributed ledger technology (DLT) or similar technology, without embodying or conferring any rights to its holder.

The asset does not aim to maintain a stable value by referencing an official currency, a basket of assets, or any other underlying rights. Instead, its valuation is entirely market-driven, based on supply and demand dynamics, and not governed by a stabilisation mechanism. It is neither pegged to any fiat currency nor backed by any external assets, thereby clearly distinguishing it from EMTs and ARTs.

Furthermore, the crypto-asset is not categorised as a financial instrument, deposit, insurance product, pension product, or any other regulated financial product under EU law. It does not grant financial rights, voting rights, or any contractual claims to its holders, ensuring that it remains outside the scope of regulatory frameworks applicable to traditional financial instruments.

#### **F.2 Crypto-asset functionality**

The WLD crypto-asset is an ERC-20-compatible digital unit issued on Ethereum and Optimism. According to the publicly available protocol documentation, the WLD crypto-asset is designed to support a set of technical interactions within the Worldcoin ecosystem. These interactions relate primarily to the operation of protocol components such as identity verification, on-chain transfers, and the distribution logic implemented

by smart contracts. The issuance and administration of parameters relevant to the WLD crypto-asset fall under the remit of the World Foundation, a foundation company limited by guarantee incorporated in the Cayman Islands.

According to current technical specifications, the WLD crypto-asset can be transferred across supported networks and integrated into applications that choose to interact with the protocol's open-source components. No automatic rebasing, redemption mechanism, underlying-asset claims, or issuer-guaranteed convertibility exist. The availability of any technical actions involving WLD depends on factors such as the operation of Ethereum and Optimism networks, the continued functioning of the relevant smart contracts, and the ongoing maintenance of the protocol infrastructure.

The WLD crypto-asset does not provide ownership, profit participation, governance rights, or economic claims against the World Foundation or any affiliated entity. Its role is confined to serving as a technical element within the Worldcoin protocol's architecture, enabling certain interactions if and when the respective systems, access mechanisms, and software components are functioning and maintained. The usability of such interactions is not assured and may change as the protocol evolves, subject to technical, operational, or governance decisions.

### **F.3 Planned application of functionalities**

Any potential inflation of the WLD supply beyond the initial 10 billion tokens can only commence, at the earliest, 15 years after launch (specifically on 2038-07-24). The decision to activate inflation, which is currently set to 0 %, is subject to a future governance decision, and any such inflation is contractually capped at a maximum rate of 1.5 % per year.

The WLD crypto-asset does not provide ownership, profit participation, governance rights, or economic claims against the World Foundation or any affiliated entity. Its role is confined to serving as a technical element within the Worldcoin protocol's architecture, enabling certain interactions if and when the respective systems, access mechanisms, and software components are functioning and maintained. The usability of

such interactions is not assured and may change as the protocol evolves, subject to technical, operational, or governance decisions.

**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**

**F.4 Type of crypto-asset white paper**

The white paper type is "Other crypto-assets" (i. e. OTHR).

**F.5 The type of submission**

The type of submission is NEWT (New white paper).

**F.6 Crypto-asset characteristics**

The tokens are crypto-assets other than EMTs and ARTs, which are available on the Ethereum and Optimism blockchain. The tokens are fungible (up to 18 digits after the decimal point) with a total supply of 10,000,000,000 units. The crypto-asset constitutes a digital representation recorded on distributed-ledger technology and does not confer ownership, governance, profit participation, or any other legally enforceable rights. Any functionalities associated with the crypto-asset are limited to potential technical features within the relevant platform environment. These functionalities do not represent contractual entitlements and may depend on future development decisions, technical design choices, and operational conditions. The crypto-asset does not embody intrinsic economic value; instead, its value, if any, is determined exclusively by market dynamics such as supply, demand, and liquidity in secondary markets.

**F.7 Commercial name or trading name**

Long Name: "Worldcoin" according to the Digital Token Identifier Foundation ([www.dtif.org](http://www.dtif.org), DTI see F.13, FFG DTI see F.14 as of 2025-10-30).

**F.8 Website of the issuer**

<https://foundation.world.org/>

**F.9 Starting date of offer to the public or admission to trading**

2026-01-06

**F.10 Publication date**

2026-01-06

**F.11 Any other services provided by the issuer**

No such services are currently known to be provided by the issuer. However, it cannot be excluded that additional services exist or may be offered in the future outside the scope of Regulation (EU) 2023/1114.

**F.12 Language or languages of the crypto-asset white paper**

EN

**F.13 Digital token identifier code used to uniquely identify the crypto-asset or each of the several crypto assets to which the white paper relates, where available**

2CTQDCXM4; FHJ2J54RT

**F.14 Functionally fungible group digital token identifier, where available**

BJD0TZ8V1

**F.15 Voluntary data flag**

This white paper has been submitted as mandatory under Regulation (EU) 2023/1114.

**F.16 Personal data flag**

Yes, this white paper contains personal data as defined in Regulation (EU) 2016/679 (GDPR).

**F.17 LEI eligibility**

The issuer should be eligible for a Legal Entity Identifier (LEI).

**F.18 Home Member State**

Germany

## F.19 Host Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden

## Part G – Information on the rights and obligations attached to the crypto-assets

### G.1 Purchaser rights and obligations

The crypto-asset does not grant any legally enforceable or contractual rights or obligations to its holders or purchasers.

Any functionalities accessible through the underlying technology are of a purely technical or operational nature and do not constitute rights comparable to ownership, profit participation, governance, or similar entitlements known from traditional financial instruments.

Accordingly, holders do not acquire any claim capable of legal enforcement against the issuer or any third party.

### G.2 Exercise of rights and obligations

As the crypto-asset does not establish any legally enforceable rights or obligations, there are no applicable procedures or conditions for their exercise.

Any interaction or functionality that may be available within the technical infrastructure of the project – such as participation mechanisms or protocol-level features – serves operational purposes only and does not create or constitute evidence of any contractual or statutory entitlement.

### G.3 Conditions for modifications of rights and obligations

As the crypto-asset does not confer any legally enforceable rights or obligations, there are no conditions or mechanisms under which such rights could be modified.

Adjustments to the technical protocol, smart contract logic, or related systems may occur in the ordinary course of development or maintenance.

Such changes do not alter the legal position of holders, as no contractual or regulatory rights exist. Holders should not interpret technical updates or governance-related changes as amendments to legally binding entitlements.

#### **G.4 Future public offers**

Information on the future offers to the public of crypto-assets were not available at the time of writing this white paper (2025-10-30).

#### **G.5 Issuer retained crypto-assets**

According to the information published in the World Whitepaper (<https://whitepaper.world.org>, accessed 2025-10-30), approximately 11.4 % of the total WLD token supply (1,140,000,000 WLD) can be regarded as issuer-retained in an extended sense, as these tokens are allocated to entities directly linked to the project's issuer and development organization (World Foundation and Tools for Humanity). The retained categories are as follows:

- 11.1 % (1,110,000,000 WLD) allocated to the Team. These tokens are subject to a 12-month lock-up period from launch, followed by 24 months of linear vesting.
- 0.3 % (30,000,000 WLD) allocated to the TFH Reserve. This allocation is subject to a 12-month lock-up, followed by 24 months of linear vesting.

The temporary token distribution can be traced on-chain, on Ethereum: <https://etherscan.io/token/0x163f8c2467924be0ae7b5347228cabf260318753#balance>

The temporary token distribution can be traced on-chain, on Optimism: <https://optimistic.etherscan.io/token/0xdc6ff44d5d932cbd77b52e5612ba0529dc6226f1#balances>

The investor must be aware that a public address cannot necessarily be assigned to a single person or entity, which limits the ability to determine exact economic influence or future actions. Token distribution changes can negatively impact the investor.

#### **G.6 Utility token classification**

No – the crypto-asset project does not concern utility tokens as defined in Article 3(9) of Regulation (EU) 2023/1114.

#### **G.7 Key features of goods/services of utility tokens**

Not applicable, as the crypto-asset described herein is not a utility token.

#### **G.8 Utility tokens redemption**

Not applicable, as the crypto-asset described herein is not a utility token.

#### **G.9 Non-trading request**

The admission to trading is sought.

#### **G.10 Crypto-assets purchase or sale modalities**

Not applicable, as this white paper is written to seek admission to trading, not for the initial offer to the public.

#### **G.11 Crypto-assets transfer restrictions**

The crypto-assets themselves are not subject to any technical or contractual transfer restrictions and are generally freely transferable. However, crypto-asset service providers may impose restrictions on buyers or sellers in accordance with applicable laws, internal policies or contractual terms agreed with their clients.

#### **G.12 Supply adjustment protocols**

No, there are no fixed protocols that can increase or decrease the supply implemented as of 2025-10-30. Also, it is possible to decrease the circulating supply, by transferring crypto-assets to so called "burn-addresses", which are addresses that render the crypto-asset "non-transferable" after sent to those addresses.

Any potential inflation of the WLD supply beyond the initial 10 billion tokens can only commence, at the earliest, 15 years after launch (specifically on 2038-07-24). The decision to activate inflation, which is currently set to 0 %, is subject to a future governance decision, and any such inflation is contractually capped at a maximum rate of 1.5 % per year.

#### **G.13 Supply adjustment mechanisms**

For the crypto-asset in scope, the supply is currently limited to 10,000,000,000 tokens. Investors should note that changes in the token supply can have a negative impact.

#### **G.14 Token value protection schemes**

No – the crypto-asset does not have any mechanisms or schemes in place that aim to stabilise or protect its market value. Its value is determined solely by market supply and demand, and may be subject to significant volatility.

#### **G.15 Token value protection schemes description**

Not applicable, as the crypto-asset in scope does not have any value protection scheme in place.

#### **G.16 Compensation schemes**

No – the crypto-asset does not have any compensation scheme.

#### **G.17 Compensation schemes description**

Not applicable, as the crypto-asset in scope does not have any compensation scheme in place.

#### **G.18 Applicable law**

This white paper is submitted in the context of an application for admission to trading on a trading platform established in the European Union. Therefore, the law of the Member State in which the trading platform is established may apply.

## **G.19 Competent court**

Any disputes arising in relation to this white paper or the admission to trading may fall under the jurisdiction of the courts located in the Member State of the trading platform.

# **Part H – information on the underlying technology**

## **H.1 Distributed ledger technology (DTL)**

The crypto-asset in scope is implemented on the Ethereum and Optimism network following the standards described below.

## **H.2 Protocols and technical standards**

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to Ethereum:

The crypto-asset operates on a well-defined set of protocols and technical standards that are intended to ensure its security, decentralization, and functionality. It is running on the Ethereum blockchain. Below are some of the key ones:

### 1. Network Protocols

The crypto-asset follows a decentralized, peer-to-peer (P2P) protocol where nodes communicate over the crypto-asset's DevP2P protocol using RLPx for data encoding.

- Transactions and smart contract execution are secured through Proof-of-Stake (PoS) consensus.
- Validators propose and attest blocks in Ethereum's Beacon Chain, finalized through Casper FFG.
- The Ethereum Virtual Machine (EVM) executes smart contracts using Turing-complete bytecode.

### 2. Transaction and Address Standards

crypto-asset Address Format: 20-byte addresses derived from Keccak-256 hashing of public keys.

Transaction Types:

- Legacy Transactions (pre-EIP-1559)
- Type 0 (Pre-EIP-1559 transactions)
- Type 1 (EIP-2930: Access list transactions)
- Type 2 (EIP-1559: Dynamic fee transactions with base fee burning)

The Pectra upgrade introduces EIP-7702, a transformative improvement to account abstraction. This allows externally owned accounts (EOAs) to temporarily act as smart contract wallets during a transaction. It provides significant flexibility, enabling functionality such as sponsored gas payments and batched operations without changing the underlying account model permanently.

### 3. Blockchain Data Structure & Block Standards

- the crypto-asset's blockchain consists of accounts, smart contracts, and storage states, maintained through Merkle Patricia Trees for efficient verification.

Each block contains:

- Block Header: Parent hash, state root, transactions root, receipts root, timestamp, gas limit, gas used, proposer signature.
- Transactions: Smart contract executions and token transfers.
- Block Size: No fixed limit; constrained by the gas limit per block (variable over time). In line with Ethereum's scalability roadmap, Pectra includes EIP-7691, which increases the maximum number of "blobs" (data chunks introduced with EIP-4844) per block. This change significantly boosts the data availability layer used by rollups, supporting cheaper and more efficient Layer 2 scalability.

### 4. Upgrade & Improvement Standards

Ethereum follows the Ethereum Improvement Proposal (EIP) process for upgrades.

The following applies to Optimism:

Optimism is a Layer 2 scaling solution built on Ethereum that uses Optimistic Rollups technology. Transactions are bundled outside the Ethereum main chain and only transmitted to Layer 1 in compressed form. This significantly reduces gas fees and increases transaction speed. Optimism is fully EVM-compatible and allows developers to migrate existing Ethereum smart contracts without major adjustments. Optimism's architecture is based on a modular rollup design, with data and execution layers treated separately to ensure scalability and flexibility.

### **H.3 Technology used**

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to Ethereum:

1. Decentralized Ledger: The Ethereum blockchain acts as a decentralized ledger for all token transactions, with the intention to preserving an unalterable record of token transfers and ownership to ensure both transparency and security.
2. Private Key Management: To safeguard their token holdings, users must securely store their wallet's private keys and recovery phrases.
3. Cryptographic Integrity: Ethereum employs elliptic curve cryptography to validate and execute transactions securely, intended to ensure the integrity of all transfers. The Keccak-256 (SHA-3 variant) Hashing Algorithm is used for hashing and address generation. The crypto-asset uses ECDSA with secp256k1 curve for key generation and digital signatures. Next to that, BLS (Boneh-Lynn-Shacham) signatures are used for validator aggregation in PoS.

The following applies to Optimism:

Optimism is fully compatible with Ethereum (Layer 1) and uses the same development tools as Solidity, Vyper, and popular frameworks (Hardhat, Foundry, Truffle). This allows

developers to deploy their applications on Optimism without making major changes. In addition, the bridge between Ethereum and Optimism is designed to allow assets to be easily transferred between the two networks.

#### **H.4 Consensus mechanism**

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to Ethereum:

1. Decentralized Ledger: The Ethereum blockchain acts as a decentralized ledger for all token transactions, with the intention to preserving an unalterable record of token transfers and ownership to ensure both transparency and security.
2. Private Key Management: To safeguard their token holdings, users must securely store their wallet's private keys and recovery phrases.
3. Cryptographic Integrity: Ethereum employs elliptic curve cryptography to validate and execute transactions securely, intended to ensure the integrity of all transfers. The Keccak-256 (SHA-3 variant) Hashing Algorithm is used for hashing and address generation. The crypto-asset uses ECDSA with secp256k1 curve for key generation and digital signatures. Next to that, BLS (Boneh-Lynn-Shacham) signatures are used for validator aggregation in PoS.

The following applies to Optimism:

Since Optimism is based on Ethereum, it ultimately inherits its security via the Ethereum blockchain and the proof-of-stake consensus. Within the rollup system, Optimism relies on a "fault proof" procedure. By default, transactions are assumed to be correct ("optimistic"). Only in the event of suspected faults is a fault proof initiated, in which incorrect transactions can be challenged by challengers. This model allows for high efficiency while ensuring correctness.

## H.5 Incentive mechanisms and applicable fees

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to the Ethereum network:

The crypto-asset's PoS system secures transactions through validator incentives and economic penalties. Validators stake at least 32 ETH and earn rewards for proposing blocks, attesting to valid ones, and participating in sync committees. Rewards are paid in newly issued ETH and transaction fees. Under EIP-1559, transaction fees consist of a base fee, which is burned to reduce supply, and an optional priority fee (tip) paid to validators. Validators face slashing if they act maliciously and incur penalties for inactivity. This system aims to increase security by aligning incentives while making the crypto-asset's fee structure more predictable and deflationary during high network activity.

The following applies to Optimism:

Optimism charges significantly lower transaction fees than Ethereum Layer 1, as transactions are bundled in the rollup and written to the Ethereum main chain in compressed form. Gas fees on Optimism continue to be paid in ETH.

The incentive model is based on increased efficiency for users (lower fees, faster confirmation) and on the role of sequencers. Sequencers are central actors who collect, organize, and include transactions in the rollup. Their revenue comes from the gas fees they charge. Fault proofs ensure that sequencers cannot permanently enforce incorrect or malicious transactions. Fault proofs and their resolution are also incentivized economically to discourage faults to begin with.

## H.6 Use of distributed ledger technology

No – DLT is not operated by the issuer, the offeror, the person seeking admission to trading, or any third-party acting on their behalf.

## **H.7 DLT functionality description**

Not applicable, as the DLT is not operated by the issuer, the offeror, the person seeking admission to trading, or any third-party acting on their behalf.

## **H.8 Audit**

As the term “technology” encompasses a broad range of components, it cannot be confirmed that all elements or aspects of the technology employed have undergone a comprehensive and systematic technical examination. Accordingly, the answer to whether an audit of the technology used has been conducted must be no. This white paper focuses primarily on risk-related aspects and therefore does not imply, nor should it be interpreted as implying, that a full assessment or audit of all technological elements has been conducted.

## **H.9 Audit outcome**

Not applicable, as no comprehensive audit of the technology used has been conducted or can be confirmed.

# **Part I – Information on risks**

## **I.1 Offer-related risks**

### 1. Regulatory and Compliance

Regulatory frameworks applicable to crypto-asset services in the European Union and in third countries are evolving. Supervisory authorities may introduce, interpret, or enforce rules that affect (i) the eligibility of this crypto-asset for admission to trading, (ii) the conditions under which a crypto-asset service provider may offer trading, custody, or transfer services for it, or (iii) the persons or jurisdictions to which such services may be provided. As a result, the crypto-asset service provider admitting this crypto-asset to trading may be required to suspend, restrict, or terminate trading or withdrawals for regulatory reasons, even if the crypto-asset itself continues to function on its underlying network.

### 2. Trading venue and connection risk

Trading in the crypto-asset depends on the uninterrupted operation of the trading platform admitting it and, where applicable, on its technical connections to external liquidity sources or venues. Interruptions such as system downtime, maintenance, faulty integrations, API changes, or failures at an external venue can temporarily prevent order placement, execution, deposits, or withdrawals, even when the underlying blockchain is functioning. In addition, trading platforms in emerging markets may operate under differing governance, compliance, and oversight standards, which can increase the risk of operational failures or disorderly market conditions.

### 3. Market formation and liquidity conditions

The price and tradability of the crypto-asset depend on actual trading activity on the venues to which the service provider is connected, whether centralized exchanges (CEXs) or decentralized exchanges (DEXs). Trading volumes may at times be low, order books thin, or liquidity concentrated on a single venue. In such conditions, buy or sell orders may not be executed in full or may be executed only at a less favorable price, resulting in slippage.

**Volatility:** The market price of the crypto-asset may fluctuate significantly over short periods, including for reasons that are not linked to changes in the underlying project or protocol. Periods of limited liquidity, shifts in overall market sentiment, or trading on only a small number of CEXs or DEXs can amplify these movements and lead to higher slippage when orders are executed. As a result, investors may be unable to sell the crypto-asset at or close to a previously observed price, even though no negative project-specific event has occurred.

### 4. Counterparty and service-provider dependence

The admission of the crypto-asset to trading may rely on several external parties, such as connected centralized or decentralized trading venues, liquidity providers, brokers, custodians, or technical integrators. If any of these counterparties fail to perform, suspend their services, or apply internal restrictions, the trading, deposit, or withdrawal of the crypto-asset on the admitting service provider can be interrupted or halted.

Quality of counterparties: Trading venues and service providers in certain jurisdictions may operate under regulatory or supervisory standards that are lower or differently enforced than those applicable in the European Union. In such environments, deficiencies in governance, risk management, or compliance may remain undetected, which increases the probability of abrupt service interruptions, investigations, or forced wind-downs.

Delisting and service suspension: The crypto-asset's availability may depend on the internal listing decisions of these counterparties. A delisting or suspension on a key connected venue can materially reduce liquidity or make trading temporarily impossible on the admitting service provider, even if the underlying crypto-asset continues to function.

Insolvency of counterparties: If a counterparty involved in holding, routing, or settling the crypto-asset becomes insolvent, enters restructuring, or is otherwise subject to resolution-type measures, assets held or processed by that counterparty may be frozen, become temporarily unavailable, or be recoverable only in part or not at all, which can result in losses for clients whose positions were maintained through that counterparty. This risk applies in particular where client assets are held on an omnibus basis or where segregation is not fully recognized in the counterparty's jurisdiction.

## 5. Operational and information risks

Due to the irrevocability of blockchain transactions, incorrect approvals or the use of wrong networks or addresses will typically make the transferred funds irrecoverable. Because trading may also rely on technical connections to other venues or service providers, downtime or faulty code in these connections can temporarily block trading, deposits, or withdrawals even when the underlying blockchain is functioning. In addition, different groups of market participants may have unequal access to technical, governance, or project-related information, which can lead to information asymmetry and place less informed investors at a disadvantage when making trading decisions.

## 6. Market access and liquidity concentration risk

If the crypto-asset is only available on a limited number of trading platforms or through a single market-making entity, this may result in reduced liquidity, greater price volatility, or periods of inaccessibility for retail holders.

## **I.2 Issuer-related risks**

### 1. Insolvency of the issuer

As with any commercial entity, the issuer may face insolvency risks. These may result from insufficient funding, low market interest, mismanagement, or external shocks (e.g. pandemics, wars). In such a case, ongoing development, support, and governance of the project may cease, potentially affecting the viability and tradability of the crypto-asset.

### 2. Legal and regulatory risks

The issuer operates in a dynamic and evolving regulatory environment. Failure to comply with applicable laws or regulations in relevant jurisdictions may result in enforcement actions, penalties, or restrictions on the project's operations. These may negatively impact the crypto-asset's availability, market acceptance, or legal status.

### 3. Operational risks

The issuer may fail to implement adequate internal controls, risk management, or governance processes. This can result in operational disruptions, financial losses, delays in updating the white paper, or reputational damage.

### 4. Governance and decision-making

The issuer's management body is responsible for key strategic, operational, and disclosure decisions. Ineffective governance, delays in decision-making, or lack of resources may compromise the stability of the project and its compliance with MiCA requirements. High concentration of decision-making authority or changes in ownership/control can amplify these risks.

### 5. Reputational risks

The issuer's reputation may be harmed by internal failures, external accusations, or association with illicit activity. Negative publicity can reduce trust in the issuer and impact the perceived legitimacy or value of the crypto-asset.

## 6. Counterparty dependence

The issuer may depend on third-party providers for certain core functions, such as technology development, marketing, legal advice, or infrastructure. If these partners discontinue their services, change ownership, or underperform, the issuer's ability to operate the project or maintain investor communication may be impaired. This could disrupt project continuity or undermine market confidence, ultimately affecting the crypto-asset's value.

## **I.3 Crypto-assets-related risks**

### 1. Valuation risk

The crypto-asset does not represent a claim, nor is it backed by physical assets or legal entitlements. Its market value is driven solely by supply and demand dynamics and may fluctuate significantly. In the absence of fundamental value anchors, such assets can lose their entire market value within a very short time. Historical market behaviour has shown that some types of crypto-assets – such as meme coins or purely speculative tokens – have become worthless. Investors should be aware that this crypto-asset may lose all of its value.

### 2. Market volatility risk

Crypto-asset prices can fluctuate sharply due to changes in market sentiment, macroeconomic conditions, regulatory developments, or technology trends. Such volatility may result in rapid and significant losses. Holders should be prepared for the possibility of losing the full amount invested.

### 3. Liquidity and price-determination risk

Low trading volumes, fragmented trading across venues, or the absence of active market makers can restrict the ability to buy or sell the crypto-asset. In such situations, it is not guaranteed that an observable market price will exist at all times. Spreads may

widen materially, and orders may only be executable under unfavourable conditions, which can make liquidation costly or temporarily impossible.

#### 4. Asset security risk

Loss or theft of private keys, unauthorised access to wallets, or failures of custodial or exchange service providers can result in the irreversible loss of assets. Because blockchain transactions are final, recovery of funds after a compromise is generally impossible.

#### 5. Fraud and scam risk

The pseudonymous and irreversible nature of blockchain transactions can attract fraudulent schemes. Typical forms include fake or unauthorised crypto-assets imitating established ones, phishing attempts, deceptive airdrops, or social-engineering attacks. Investors should exercise caution and verify the authenticity of counterparties and information sources.

#### 6. Legal and regulatory reclassification risk

Legislative or regulatory changes in the European Union or in the Member State where the crypto-asset is admitted to trading may alter its legal classification, permitted uses, or tradability. In third countries, the crypto-asset may be treated as a financial instrument or security, which can restrict its offering, trading, or custody.

#### 7. Absence of investor protection

The crypto-asset is not covered by investor-compensation or deposit-guarantee schemes. In the event of loss, fraud, or insolvency of a service provider, holders may have no access to recourse mechanisms typically available in regulated financial markets.

#### 8. Counterparty risk

Reliance on third-party exchanges, custodians, or intermediaries exposes holders to operational failures, insolvency, or fraud of these parties. Investors should conduct due

diligence on service providers, as their failure may lead to the partial or total loss of held assets.

#### 9. Reputational risk

Negative publicity related to security incidents, misuse of blockchain technology, or associations with illicit activity can damage public confidence and reduce the crypto-asset's market value.

#### 10. Community and sentiment risk

Because the crypto-asset's perceived relevance and expected future use depend largely on community engagement and the prevailing sentiment, a loss of public interest, negative coverage or reduced activity of key contributors can materially reduce market demand.

#### 11. Macroeconomic and interest-rate risk

Fluctuations in interest rates, exchange rates, general market conditions, or overall market volatility can influence investor sentiment towards digital assets and affect the crypto-asset's market value.

#### 12. Taxation risk

Tax treatment varies across jurisdictions. Holders are individually responsible for complying with all applicable tax laws, including the reporting and payment of taxes arising from the acquisition, holding, or disposal of the crypto-asset.

#### 13. Anti-money-laundering and counter-terrorist-financing risk

Wallet addresses or transactions connected to the crypto-asset may be linked to sanctioned or illicit activity. Regulatory responses to such findings may include transfer restrictions, report obligations, or the freezing of assets on certain venues.

#### 14. Market-abuse risk

Due to limited oversight and transparency, crypto-assets may be vulnerable to market-abuse practices such as spoofing, pump-and-dump schemes, or insider trading. Such activities can distort prices and expose holders to sudden losses.

## 15. Legal ownership and jurisdictional risk

Depending on the applicable law, holders of the crypto-asset may not have enforceable ownership rights or effective legal remedies in cases of disputes, fraud, or service failure. In certain jurisdictions, access to exchanges or interfaces may be restricted by regulatory measures, even if on-chain transfer remains technically possible.

## 16. Concentration risk

A large proportion of the total supply may be held by a small number of holders. This can enable market manipulation, governance dominance, or sudden large-scale liquidations that adversely affect market stability, price levels, and investor confidence.

### **I.4 Project implementation-related risks**

As this white paper relates to the admission to trading of the crypto-asset, the following risk description reflects general implementation risks on the crypto-asset service provider's side typically associated with crypto-asset projects. The party admitting the asset to trading is not involved in the project's implementation and does not assume responsibility for its governance, funding, or execution.

Delays, failures, or changes in the implementation of the project as outlined in its public roadmap or technical documentation may negatively impact the perceived credibility or usability of the crypto-asset. This includes risks related to project governance, resource allocation, technical delivery, and team continuity.

Key-person risk: The project may rely on a limited number of individuals for development, maintenance, or strategic direction. The departure, incapacity, or misalignment of these individuals may delay or derail the implementation.

Timeline and milestone risk: Project milestones may not be met as announced. Delays in feature releases, protocol upgrades, or external integrations can undermine market confidence and affect the adoption, use, or value of the crypto-asset.

Delivery risk: Even if implemented on time, certain functionalities or integrations may not perform as intended or may be scaled back during execution, limiting the token's practical utility.

## I.5 Technology-related risks

As this white paper relates to the admission to trading of the crypto-asset, the following risks concern the underlying distributed ledger technology (DLT), its supporting infrastructure, and related technical dependencies. Failures or vulnerabilities in these systems may affect the availability, integrity, or transferability of the crypto-asset.

### 1. Blockchain dependency risk

The functionality of the crypto-asset depends on the continuous and stable operation of the blockchain(s) on which it is issued. Network congestion, outages, or protocol errors may temporarily or permanently disrupt on-chain transactions. Extended downtime or degradation in network performance can affect trading, settlement, or usability of the crypto-asset.

### 2. Smart contract vulnerability risk

The smart contract that defines the crypto-asset's parameters or governs its transfers may contain coding errors or security vulnerabilities. Exploitation of such weaknesses can result in unintended token minting, permanent loss of funds, or disruption of token functionality. Even after external audits, undetected vulnerabilities may persist due to the immutable nature of deployed code.

### 3. Wallet and key-management risk

The custody of crypto-assets relies on secure private key management. Loss, theft, or compromise of private keys results in irreversible loss of access. Custodians, trading venues, or wallet providers may be targeted by cyberattacks. Compatibility issues between wallet software and changes to the blockchain protocol (e.g. network upgrades) can further limit user access or the ability to transfer the crypto-asset.

Outdated or vulnerable wallet software:

Users relying on outdated, unaudited, or unsupported wallet software may face compatibility issues, security vulnerabilities, or failures when interacting with the blockchain. Failure to update wallet software in line with protocol developments can result in transaction errors, loss of access, or exposure to known exploits.

#### 4. Network security risks

Attack Risks: Blockchains may be subject to denial-of-service (DoS) attacks, 51% attacks, or other exploits targeting the consensus mechanism. These can delay transactions, compromise finality, or disrupt the accurate recording of transfers.

Centralization Concerns: Despite claims of decentralisation, a relatively small number of validators or a high concentration of stake may increase the risk of collusion, censorship, or coordinated network downtime, which can affect the resilience and operational reliability of the crypto-asset.

#### 5. Bridge and interoperability risk

Where tokens can be bridged or wrapped across multiple blockchains, vulnerabilities in bridge protocols, validator sets, or locking mechanisms may result in loss, duplication, or misrepresentation of assets. Exploits or technical failures in these systems can instantly impact circulating supply, ownership claims, or token fungibility across chains.

#### 6. Forking and protocol-upgrade risk

Network upgrades or disagreements among node operators or validators can result in blockchain “forks”, where the blockchain splits into two or more incompatible versions that continue separately from a shared past. This may lead to duplicate token representations or incompatibilities between exchanges and wallets. Until consensus stabilises, trading or transfers may be disrupted or misaligned. Such situations may be difficult for retail holders to navigate, particularly when trading platforms or wallets display inconsistent token information.

#### 7. Economic-layer and abstraction risk

Mechanisms such as gas relayers, wrapped tokens, or synthetic representations may alter the transaction economics of the underlying token. Changes in transaction costs, token demand, or utility may reduce its usage and weaken both its economic function and perceived value within its ecosystem.

#### 8. Spam and network-efficiency risk

High volumes of low-value ("dust") or automated transactions may congest the network, slow validation times, inflate ledger size, and raise transaction costs. This can impair performance, reduce throughput, and expose address patterns to analysis, thereby reducing network efficiency and privacy.

#### 9. Front-end and access-interface risk

If users rely on centralised web interfaces or hosted wallets to interact with the blockchain, service outages, malicious compromises, or domain expiries affecting these interfaces may block access to the crypto-asset, even while the blockchain itself remains fully functional. Dependence on single web portals introduces a critical point of failure outside the DLT layer.

#### 10. Decentralisation claim risk

While the technical infrastructure may appear distributed, the actual governance or economic control of the project may lie with a small set of actors. This disconnect between marketing claims and structural reality can lead to regulatory scrutiny, reputational damage, or legal uncertainty – especially if the project is presented as 'community-governed' without substantiation.

### **I.6 Mitigation measures**

None.

## **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**

#### **S.1 Name**

Crypto Risk Metrics GmbH

#### **S.2 Relevant legal entity identifier**

39120077M9TG0O1FE242

### S.3 Name of the cryptoasset

Worldcoin

### S.4 Consensus Mechanism

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to Ethereum:

1. Decentralized Ledger: The Ethereum blockchain acts as a decentralized ledger for all token transactions, with the intention to preserving an unalterable record of token transfers and ownership to ensure both transparency and security.
2. Private Key Management: To safeguard their token holdings, users must securely store their wallet's private keys and recovery phrases.
3. Cryptographic Integrity: Ethereum employs elliptic curve cryptography to validate and execute transactions securely, intended to ensure the integrity of all transfers. The Keccak-256 (SHA-3 variant) Hashing Algorithm is used for hashing and address generation. The crypto-asset uses ECDSA with secp256k1 curve for key generation and digital signatures. Next to that, BLS (Boneh-Lynn-Shacham) signatures are used for validator aggregation in PoS.

The following applies to Optimism:

Since Optimism is based on Ethereum, it ultimately inherits its security via the Ethereum blockchain and the proof-of-stake consensus. Within the rollup system, Optimism relies on a "fault proof" procedure. By default, transactions are assumed to be correct ("optimistic"). Only in the event of suspected faults is a fault proof initiated, in which incorrect transactions can be challenged by challengers. This model allows for high efficiency while ensuring correctness.

### S.5 Incentive Mechanisms and Applicable Fees

The crypto asset that is the subject of this white paper is available on the Ethereum and Optimism network.

The following applies to the Ethereum network:

The crypto-asset's PoS system secures transactions through validator incentives and economic penalties. Validators stake at least 32 ETH and earn rewards for proposing blocks, attesting to valid ones, and participating in sync committees. Rewards are paid in newly issued ETH and transaction fees. Under EIP-1559, transaction fees consist of a base fee, which is burned to reduce supply, and an optional priority fee (tip) paid to validators. Validators face slashing if they act maliciously and incur penalties for inactivity. This system aims to increase security by aligning incentives while making the crypto-asset's fee structure more predictable and deflationary during high network activity.

The following applies to Optimism:

Optimism charges significantly lower transaction fees than Ethereum Layer 1, as transactions are bundled in the rollup and written to the Ethereum main chain in compressed form. Gas fees on Optimism continue to be paid in ETH.

The incentive model is based on increased efficiency for users (lower fees, faster confirmation) and on the role of sequencers. Sequencers are central actors who collect, organize, and include transactions in the rollup. Their revenue comes from the gas fees they charge. Fault proofs ensure that sequencers cannot permanently enforce incorrect or malicious transactions. Fault proofs and their resolution are also incentivized economically to discourage faults to begin with.

#### **S.6 Beginning of the period to which the disclosure relates**

2024-11-19

#### **S.7 End of the period to which the disclosure relates**

2025-11-19

#### **S.8 Energy consumption**

490.46587 kWh/a

## **S.9 Energy consumption sources and methodologies**

The energy consumption associated with this crypto-asset is aggregated of multiple contributing components, primarily the underlying blockchain network and the execution of token-specific operations. To determine the energy consumption of a token, the energy consumption of the underlying blockchain networks Ethereum and Optimism is calculated first. A proportionate share of that energy use is then attributed to the token based on its activity level within the network (e.g. transaction volume, contract execution).

The Functionally Fungible Group Digital Token Identifier (FFG DTI) is used to determine all technically equivalent implementations of the crypto-asset in scope.

Estimates regarding hardware types, node distribution, and the number of network participants are based on informed assumptions, supported by best-effort verification against available empirical data. Unless robust evidence suggests otherwise, participants are assumed to act in an economically rational manner. In line with the precautionary principle, conservative estimates are applied where uncertainty exists – that is, estimates tend towards the higher end of potential environmental impact.

## **S.10 Renewable energy consumption**

26.5386870830 %

## **S.11 Energy intensity**

0.00008 kWh

## **S.12 Scope 1 DLT GHG emissions – Controlled**

0.00000 tCO2e/a

## **S.13 Scope 2 DLT GHG emissions – Purchased**

0.16307 tCO2e/a

## **S.14 GHG intensity**

0.00003 kgCO2e

### **S.15 Key energy sources and methodologies**

To determine the proportion of renewable energy used in the operation of the network, node locations are determined using public information sources, open-source node crawlers and proprietary crawling tools. Where no sufficient geographic distribution of nodes is available, reference networks with comparable incentive structures and consensus mechanisms are used for approximation. This geolocation data is then merged with publicly available information sourced from Our World in Data, which draws on datasets from Ember (2025) and the Energy Institute – Statistical Review of World Energy (2024). Energy intensity is calculated as the marginal energy cost of processing a single additional transaction on the network.

Source(s): Ember (2025); Energy Institute - Statistical Review of World Energy (2024) - with major processing by Our World in Data. "Share of electricity generated by renewables - Ember and Energy Institute" [dataset]. Ember, "Yearly Electricity Data Europe"; Ember, "Yearly Electricity Data"; Energy Institute, "Statistical Review of World Energy" [original data]. Retrieved from <https://ourworldindata.org/grapher/share-electricity-renewables>.

### **S.16 Key GHG sources and methodologies**

To determine the greenhouse gas (GHG) emissions associated with the operation of the network, node locations are determined using public information sources, open-source node crawlers and proprietary crawling tools. Where no sufficient geographic distribution of nodes is available, reference networks with comparable incentive structures and consensus mechanisms are used for approximation. This geolocation data is then merged with publicly available information sourced from Our World in Data, which draws on datasets from Ember (2025) and the Energy Institute – Statistical Review of World Energy (2024). Carbon intensity is calculated as the marginal emissions associated with processing a single additional transaction on the network.

Source(s): Ember (2025); Energy Institute – Statistical Review of World Energy (2024) - with major processing by Our World in Data. "Carbon intensity of electricity generation – Ember and Energy Institute" [dataset]. Ember, "Yearly Electricity Data Europe"; Ember,

"Yearly Electricity Data"; Energy Institute, "Statistical Review of World Energy" [original data]. Retrieved from <https://ourworldindata.org/grapher/carbon-intensity-electricity>. Licensed under CC BY 4.0.

