

White paper drafted under the European Markets in Crypto-Assets Regulation (EU) 2023/1114 for FFG TXFJ91WW6



Preamble

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01. Date of notification

2025-08-25

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 omissions 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

The token has no utility other than being holdable and transferable and can not be exchanged for any goods or services at the time of writing this white paper (2025-06-16).



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 \$happycat token is an ERC-20 token deployed on the Ethereum blockchain, likely inspired by meme-based or community-driven crypto projects, given its name and lack of formal documentation (etherscan.io/token/0x0463af01962893f585f2326057af48e53d4dd7ed, accessed 2025-06-16). No official white paper was identified, suggesting a decentralized or grassroots initiative, common in the memecoin space.

The official website is https://www.happycatcoineth.com/, an X-presence can be found at

https://x.com/HappyCatoken.

09. Information about the quality and quantity of goods or

services to which the utility tokens give access and restrictions

on the transferability

Since holding the crypto-asset does not grant access to any goods or services, this is not

applicable at the time of writing this white paper (2025-06-12).

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

trading

Crypto Risk Metrics GmbH is seeking admission to trading on any Crypto Asset Service

Provider platform in the European Union in accordance to 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. In accordance to Article

5(4), this crypto-asset white paper may be used by entities admitting the token to

trading after Crypto Risk Metrics GmbH as the person responsible for drawing up such

white paper has given its consent to its use in writing to the repective Crypto Asset

Service Provider. If a CASP wishes to use this white paper, inquiries can be made under

info@crypto-risk-metrics.com.

Part A - Information about the offeror or the person seeking

admission to trading

A.1 Name

Crypto Risk Metrics GmbH

A.2 Legal form

2HBR



A.3 Registered address

DE, Lange Reihe 73, 20099 Hamburg, Germany

A.4 Head office

Not applicable.

A.5 Registration date

2018-12-03

A.6 Legal entity identifier

39120077M9TG0O1FE242

A.7 Another identifier required pursuant to applicable national law

Crypto Risk Metrics GmbH is registered with the commercial register in the the city of Hamburg, Germany, under number HRB 154488.

A.8 Contact telephone number

+4915144974120

A.9 E-mail address

info@crypto-risk-metrics.com

A.10 Response time (Days)

030

A.11 Parent company

Not applicable.

A.12 Members of the management body

Name	Position	Address
Tim Zölitz	Chairman	Lange Reihe 73, 20099
		Hamburg, Germany

A.13 Business activity

Crypto Risk Metrics GmbH is a technical service provider, who supports regulated

entities in the fulfillment of their regulatory requirements. In this regard, Crypto Risk

Metrics GmbH acts as a data-provider for ESG-data according to article 66 (5). Due to

the regulations laid out in article 5 (4) 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 at providing

central services for crypto-asset white papers in order to minimize market confusion

due to conflicting white papers for the same asset.

A.14 Parent company business activity

Not applicable.

A.15 Newly established

Crypto Risk Metrics GmbH has been etablished since 2018 and is therefore not newly

established (i. e. older than three years).

A.16 Financial condition for the past three years

Crypto Risk Metrics GmbH's profit after tax for the last three financial years are as

follows:

2024 (unaudited): negative 50.891,81 EUR

2023 (unaudited): negative 27.665,32 EUR

2022: 104.283,00 EUR.

As 2023 and 2024 were the years building software for the MiCAR-Regulation which was

not yet in place, revenue streams from these investments are expeted to be generated

in 2025.

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A.17 Financial condition since registration

This point would only be applicable if the company were newly established and the financial conditions for the past three years had not been provided in the bulletpoint before.

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

B.2 Name

The token does not appear to be issued by a formal company or foundation in the traditional sense. Instead, it follows a decentralized, community-driven approach common in the meme coin space.

B.3 Legal form

Could not be found while drafting this white paper (2025-06-30).

B4. Registered address

Could not be found while drafting this white paper (2025-06-30).

B.5 Head office

Could not be found while drafting this white paper (2025-06-30).

B.6 Registration date

Could not be found while drafting this white paper (2025-06-30).

B.7 Legal entity identifier

Could not be found while drafting this white paper (2025-06-30).

B.8 Another identifier required pursuant to applicable national law

Not applicable.



B.9 Parent company

Not applicable.

B.10 Members of the management body

Could not be found while drafting this white paper (2025-06-30).

B.11 Business activity

Could not be found while drafting this white paper (2025-06-30).

B.12 Parent company business activity

Could not be found while drafting this white paper (2025-06-30).

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.

C.2 Legal form

Not applicable.

C.3 Registered address

Not applicable.

C.4 Head office

Not applicable.

C.5 Registration date

Not applicable.



C.6 Legal entity identifier

Not applicable.

C.7 Another identifier required pursuant to applicable national law

Not applicable.

C.8 Parent company

Not applicable.

C.9 Reason for crypto-Asset white paper Preparation

Not applicable.

C.10 Members of the Management body

Not applicable.

C.11 Operator business activity

Not applicable.

C.12 Parent company business activity

Not applicable.

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.

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.

Part D - Information about the crypto-asset project

D.1 Crypto-asset project name

Long Name: "happycat", Short Name: "happycat" according to the Digital Token Identifier Foundation (www.dtif.org, DTI see F.13, FFG DTI see F.14 as of 2025-06-16).

D.2 Crypto-assets name

See F.13.

D.3 Abbreviation

See F.13.

D.4 Crypto-asset project description

The \$happycat token is an ERC-20 token deployed on the Ethereum blockchain, likely

inspired by meme-based or community-driven crypto projects, given its name and lack

of formal documentation. The official website states that:

https://www.happycatcoineth.com/, accessed 2025-06-16): "We hold a serious stance on

blockchain technology, but it is important to understand that the HappyCat Token and

its associated project are exclusively designed for educational, entertainment, and

experimental purposes. The information conveyed in our content, communications, and

any other materials should not be interpreted as financial, investment, legal, or any

other type of professional advice. By engaging with the HappyCat Token and project,

you acknowledge that you are partaking in a high-risk experiment and assume full

responsibility for any decisions you make. We highly recommend individuals to conduct

thorough research and seek guidance from qualified professionals before engaging in

any activities related to blockchain, cryptocurrency, or tokens. Create by HappyCat

Lover."

No official white paper, or documentation was identified, suggesting a decentralized or

grassroots initiative, common in the memecoin space.

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

asset project

The project appears to lack a centralized issuer, such as a company or foundation, and

no natural or legal persons are explicitly associated with its development. The token's

purpose is mostly cultural, its name suggests a focus on community engagement,

potentially tied to cat-themed memes or NFTs, a popular trend in crypto.

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The @happycatoken X account has minimal activity and lacks substantive details about

the project.

It was created in July 2024. No white paper, or verified team is linked in the bio, only a

generic description: "The purr-fect memecoin on Ethereum!"

(x.com/happycatoken?lang=de, accessed 2025-06-16). The account has few posts,

primarily promotional memes featuring cat images with captions like "\$HAPPYCATS to

the MOON!" or "Join the meow movement!" (exemplary:

https://x.com/HappyCatoken/status/1688896861401432064, accessed 2025-06-16)

D.6 Utility Token Classification

The token does not classify as a utility token.

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

Not applicable.

D.8 Plans for the token

At the time of writing this white paper (2025-06-16), no future plans for the crypto-asset

were to be found.

D.9 Resource allocation

Could not be found while drafting this white paper (2025-06-30).

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

Could not be found while drafting this white paper (2025-06-30).



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) on any Crypto Asset Service Providers platform that has obtained the written consent of Crypto Risk Metrics GmbH as the person drafting this white paper.

E.2 Reasons for public offer or admission to trading

As already stated in A.13, Crypto Risk Metrics GmbH aims to provide central services to draw up crypto-asset white papers in accordance to COMMISSION IMPLEMENTING REGULATION (EU) 2024/2984. These services are offered in order to minimize market confusion due to conflicting white papers for the same asset drawn up from different Crypto Asset Service Providers. As of now, such a scenario seems highly likely as a Crypto Asset Service Provider who drew up a crypto-asset white paper and admitted the respective token in the Union has no incentive to give his written consent to another Crypto Asset Service Provider according to Article 5 (4 b) of the REGULATION (EU) 2023/1114 to use the white paper for his regulatory obligations, as this would 1. strenghthen the market-positioning of the other Crypto Asset Service Provider (who is most likely a competitor) and 2. also entail liability risks.

E.3 Fundraising target

Not applicable.

E.4 Minimum subscription goals

Not applicable.

E.5 Maximum subscription goals

Not applicable.

E.6 Oversubscription acceptance

Not applicable.



E.7 Oversubscription allocation

Not applicable.

E.8 Issue price

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

E.10 Subscription fee

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

E.11 Offer price determination method

Once the token is admitted to trading its price will be determined by demand (buyers) and supply (sellers).

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

1,000,000,000,000 tokens were minted. (etherscan.io/token/0x0463af01962893f585f2326057af48e53d4dd7ed, accessed 2025-06-16)

E.13 Targeted holders

ALL

E.14 Holder restrictions

The Holder restrictions are subject to the rules applicable to the Crypto Asset Service Provider as well as additional restrictions the Crypto Asset Service Providers might set in force.



E.15 Reimbursement notice Not applicable. E.16 Refund mechanism Not applicable. **E.17 Refund timeline** Not applicable. E.18 Offer phases Not applicable. E.19 Early purchase discount Not applicable. **E.20 Time-limited offer** Not applicable. E.21 Subscription period beginning Not applicable. E.22 Subscription period end Not applicable. E.23 Safeguarding arrangements for offered funds/crypto- Assets Not applicable. E.24 Payment methods for crypto-asset purchase The payment methods are subject to the respective capabilities of the Crypto Asset

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Service Provider listing the crypto-asset.

Not applicable.

E.25 Value transfer methods for reimbursement

E.26 Right of withdrawal

Not applicable, as this white paper is written to support admission to trading and not for

the initial offer to the public.

E.27 Transfer of purchased crypto-assets

The transfer of purchased crypto-assets are subject to the respective capabilities of the

Crypto Asset Service Provider listing the crypto-asset.

E.28 Transfer time schedule

Not applicable, as this white paper is written to support admission to trading and not for

the initial offer to the public.

E.29 Purchaser's technical requirements

The technical requirements that the purchaser is required to fulfil to hold the crypto-

assets of purchased crypto-assets are subject to the respective capabilities of the

Crypto Asset Service Provider listing the crypto-asset.

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

Not applicable.

E.31 CASP identifier

Not applicable.

E.32 Placement form

Not applicable.

E.33 Trading platforms name

The trading on all MiCAR-compliant trading platforms is sought.

E.34 Trading platforms Market identifier code (MIC)

Not applicable.

E.35 Trading platforms access

This depends on the trading platform listing the asset.

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E.36 Involved costs

This depends on the trading platform listing the asset. Furthermore, costs may occur for

making transfers out of the platform (i. e. "gas costs" for blockchain network use that

may exceed the value of the crypto-asset itself).

E.37 Offer expenses

Not applicable, as this crypto-asset white paper concerns the admission to trading and

not the offer of the token to the public.

E.38 Conflicts of interest

MiCAR-compliant Crypto Asset Service Providers shall have strong measurements in

place in order to manage conflicts of interests. Due to the broad audience this white-

paper is adressing, potential investors should always check the conflicts of Interest

policy of their respective counterparty.

E.39 Applicable law

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the

admission to trading is sought.

E.40 Competent court

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the

admission to trading is sought.

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 (MiCAR) but does not qualify 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.

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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 supported by a stabilization

mechanism. It is neither pegged to any fiat currency nor backed by any external assets,

distinguishing it clearly from EMTs and ARTs.

Furthermore, the crypto-asset is not categorized 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

There is none, other than the ability to hold and transfer the crypto-asset.

F.3 Planned application of functionalities

All functionalities referred to in F.2 have already been applied since they are intrinsic to

the tokens.

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 white paper submission type is "CORR", which stands for "Correction".

F.6 Crypto-asset characteristics

The tokens are crypto-assets other than EMTs and ARTs, which are available on the

Ethereum blockchain. The tokens are fungible (up to 18 digits after the decimal point).

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The tokens are a digital representation of value.



F.7 Commercial name or trading name

See F.13.

F.8 Website of the issuer

https://www.happycatcoineth.com/

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

2025-07-25

F.10 Publication date

2025-07-25

F.11 Any other services provided by the issuer

It is not possible to exclude a possibility that the issuer of the token provides or will provide other services not covered by Regulation (EU) 2023/1114 (i.e. MiCAR).

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

ΕN

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

7NXQXNNPH

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

TXFJ91WW6

F.15 Voluntary data flag

Mandatory.

F.16 Personal data flag

The white paper does contain personal data.

F.17 LEI eligibility

The issuer should be eligible for a Legal Entity Identifier.

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

There are no rights or obligations attached for/of the purchaser.

G.2 Exercise of rights and obligations

See G.1.

G.3 Conditions for modifications of rights and obligations

As the token grants neither rights nor obligations, there are no conditions under which

the rights and obligations may be modified applicable.

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 (2025-06-16).

G.5 Issuer retained crypto-assets

As the issuer could not be determined, no information about retained assets by the

issuer itself were available at the time of drafting this white paper (2025-06-16).

G.6 Utility token classification

No



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

Not applicable.

G.8 Utility tokens redemption

Not applicable.

G.9 Non-trading request

The admission to trading is sought.

G.10 Crypto-assets purchase or sale modalities

Not applicable, as the admission to trading of the tokens is sought.

G.11 Crypto-assets transfer restrictions

The crypto-assets as such do not have any transfer restrictions and are generally freely transferable. The Crypto Asset Service Providers can impose their own restrictions in agreements they enter with their clients. The Crypto Asset Service Providers may impose restrictions to buyers and sellers in accordance with applicable laws and internal policies and terms.

G.12 Supply adjustment protocols

No, there are no fixed protocols that can increase or decrease the supply implemented as of 2025-06-16. It is possible to decrease the circulating supply, by transferring crypto-assets to so called "burn-adresses", which are adresses that render the crypto-asset "non-transferable" after sent to those adresses.

G.13 Supply adjustment mechanisms

The mint authority has been forfeited, therefore it is highly unlikely that new tokens can be minted (see https://etherscan.io/token/0x0463af01962893f585f2326057af48e53d4dd7ed#readCon tract, accessed 2025-06-16). While some discussions suggest that, in theory, a private key could exist for them, the chance of anyone discovering such a key is computationally infeasible with current and foreseeable technology. (see



G.14 Token value protection schemes

No, the token does not have value protection schemes.

G.15 Token value protection schemes description

Not applicable.

G.16 Compensation schemes

No, the token does not have compensation schemes.

G.17 Compensation schemes description

Not applicable.

G.18 Applicable law

Applicable law likely depends on the location of any particular transaction with the token.

G.19 Competent court

Competent court likely depends on the location of any particular transaction with the token.

Part H - information on the underlying technology

H.1 Distributed ledger technology (DTL)

See F.13

H.2 Protocols and technical standards

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,

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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.

H.3 Technology used

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.

H.4 Consensus mechanism

The crypto-asset's Proof-of-Stake (PoS) consensus mechanism, introduced with The

Merge in 2022, replaces mining with validator staking. Validators must stake at least 32

ETH every block a validator is randomly chosen to propose the next block. Once

proposed the other validators verify the blocks integrity. The network operates on a slot

and epoch system, where a new block is proposed every 12 seconds, and finalization

occurs after two epochs (~12.8 minutes) using Casper-FFG. The Beacon Chain

coordinates validators, while the fork-choice rule (LMD-GHOST) ensures the chain

follows the heaviest accumulated validator votes. Validators earn rewards for proposing

and verifying blocks, but face slashing for malicious behavior or inactivity. PoS aims to

improve energy efficiency, security, and scalability, with future upgrades like Proto-

Danksharding enhancing transaction efficiency.

H.5 Incentive mechanisms and applicable fees

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.

H.6 Use of distributed ledger technology

No, DLT is not operated by the issuer or a third party acting on the issuer's behalf.

H.7 DLT functionality description

Not applicable.

H.8 Audit

As we are understanding the question relating to "technology" to be interpreted in a

broad sense, the answer answer to whether an audit of "the technology used" was

conducted is "no, we can not guarantee, that all parts of the technology used have been

audited". This is due to the fact this report focusses on risk, and we can not guarantee

that each part of the technology used was audited.

H.9 Audit outcome

Not applicable.

Part I - Information on risks

I.1 Offer-related risks

1. Regulatory and Compliance

This white paper has been prepared with utmost caution; however, uncertainties in the

regulatory requirements and future changes in regulatory frameworks could potentially

impact the token's legal status and its tradability. There is also a high probability that

other laws will come into force, changing the rules for the trading of the token.

Therefore, such developments shall be monitored and acted upon accordingly.

2. Operational and Technical

Blockchain Dependency: The token is entirely dependent on the blockchain the crypto-

asset is issued upon (as of 2025-06-16). Any issues, such as downtime, congestion, or

security vulnerabilities within the blockchain, could adversely affect the token's

functionality.

Smart Contract Risks: Smart contracts governing the token may contain hidden

vulnerabilities or bugs that could disrupt the token offering or distribution processes.

Connection Dependency: As the trading of the token also involves other trading venues,

technical risks such as downtime of the connection or faulty code are also possible.

Human errors: Due to the irrevocability of blockchain-transactions, approving wrong

transactions or using incorrect networks/addresses will most likely result in funds not

being accessibly anymore.

Custodial risk: When admitting the token to trading, the risk of losing clients assets due

to hacks or other malicious acts is given. This is due to the fact the token is hold in

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custodial wallets for the customers.

3. Market and Liquidity

Volatility: The token will most likely be subject to high volatility and market speculation.

Price fluctuations could be significant, posing a risk of substantial losses to holders.

Liquidity Risk: Liquidity is contingent upon trading activity levels on decentralized

exchanges (DEXs) and potentially on centralized exchanges (CEXs), should they be

involved. Low trading volumes may restrict the buying and selling capabilities of the

tokens.

4. Counterparty

As the admission to trading involves the connection to other trading venues,

counterparty risks arise. These include, but are not limited to, the following risks:

General Trading Platform Risk: The risk of trading platforms not operating to the highest

standards is given. Examples like FTX show that especially in nascent industries,

compliance and oversight-frameworks might not be fully established and/or enforced.

Listing or Delisting Risks: The listing or delisting of the token is subject to the trading

partners internal processes. Delisting of the token at the connected trading partners

could harm or completely halt the ability to trade the token.

5. Liquidity

Liquidity of the token can vary, especially when trading activity is limited. This could

result in high slippage when trading a token.

6. Failure of one or more Counterparties

Another risk stems from the internal operational processes of the counterparties used.

As there is no specific oversight other than the typical due diligence check, it cannot be

guaranteed that all counterparties adhere to the best market standards.

Bankruptcy Risk: Counterparties could go bankrupt, possibly resulting in a total loss for

the clients assets hold at that counterparty.

I.2 Issuer-related risks

1. Insolvency

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As with every other commercial endeavor, the risk of insolvency of the issuer is given.

This could be caused by but is not limited to lack of interest from the public, lack of

funding, incapacitation of key developers and project members, force majeure (including

pandemics and wars) or lack of commercial success or prospects.

2. Counterparty

In order to operate, the issuer has most likely engaged in different business

relationships with one or more third parties on which it strongly depends on. Loss or

changes in the leadership or key partners of the issuer and/or the respective

counterparties can lead to disruptions, loss of trust, or project failure. This could result

in a total loss of economic value for the crypto-asset holders.

3. Legal and Regulatory Compliance

Cryptocurrencies and blockchain-based technologies are subject to evolving regulatory

landscapes worldwide. Regulations vary across jurisdictions and may be subject to

significant changes. Non-compliance can result in investigations, enforcement actions,

penalties, fines, sanctions, or the prohibition of the trading of the crypto-asset impacting

its viability and market acceptance. This could also result in the issuer to be subject to

private litigation. The beforementioned would most likely also lead to changes with

respect to trading of the crypto-asset that may negatively impact the value, legality, or

functionality of the crypto-asset.

4. Operational

Failure to develop or maintain effective internal control, or any difficulties encountered

in the implementation of such controls, or their improvement could harm the issuer's

business, causing disruptions, financial losses, or reputational damage.

5. Industry

The issuer is and will be subject to all of the risks and uncertainties associated with a

memecoin-project, where the token issued has zero intrinsic value. History has shown

that most of this projects resulted in financial losses for the investors and were only set-

up to enrich a few insiders with the money from retail investors.

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6. Reputational

The issuer faces the risk of negative publicity, whether due to, without limitation,

operational failures, security breaches, or association with illicit activities, which can

damage the issuer reputation and, by extension, the value and acceptance of the

crypto-asset.

7. Competition

There are numerous other crypto-asset projects in the same realm, which could have an

effect on the crypto-asset in question.

8. Unanticipated Risk

In addition to the risks included in this section, there might be other risks that cannot be

foreseen. Additional risks may also materialize as unanticipated variations or

combinations of the risks discussed.

I.3 Crypto-assets-related risks

1. Valuation

As the crypto-asset does not have any intrinsic value, and grants neither rights nor

obligations, the only mechanism to determine the price is supply and demand.

Historically, most crypto-assets have dramatically lost value and were not a beneficial

investment for the investors. Therefore, investing in these crypto-assets poses a high

risk, and the loss of funds can occur.

2. Market Volatility

Crypto-asset prices are highly susceptible to dramatic fluctuations influence by various

factors, including market sentiment, regulatory changes, technological advancements,

and macroeconomic conditions. These fluctuations can result in significant financial

losses within short periods, making the market highly unpredictable and challenging for

investors. This is especially true for crypto-assets without any intrinsic value, and

investors should be prepared to lose the complete amount of money invested in the

respective crypto-assets.

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3. Liquidity Challenges

Some crypto-assets suffer from limited liquidity, which can present difficulties when

executing large trades without significantly impacting market prices. This lack of liquidity

can lead to substantial financial losses, particularly during periods of rapid market

movements, when selling assets may become challenging or require accepting

unfavorable prices.

4. Asset Security

Crypto-assets face unique security threats, including the risk of theft from exchanges or

digital wallets, loss of private keys, and potential failures of custodial services. Since

crypto transactions are generally irreversible, a security breach or mismanagement can

result in the permanent loss of assets, emphasizing the importance of strong security

measures and practices.

5. Scams

The irrevocability of transactions executed using blockchain infrastructure, as well as the

pseudonymous nature of blockchain ecosystems, attracts scammers. Therefore,

investors in crypto-assets must proceed with a high degree of caution when investing in

if they invest in crypto-assets. Typical scams include – but are not limited to – the

creation of fake crypto-assets with the same name, phishing on social networks or by

email, fake giveaways/airdrops, identity theft, among others.

6. Blockchain Dependency

Any issues with the blockchain used, such as network downtime, congestion, or security

vulnerabilities, could disrupt the transfer, trading, or functionality of the crypto-asset.

7. Smart Contract Vulnerabilities

The smart contract used to issue the crypto-asset could include bugs, coding errors, or

vulnerabilities which could be exploited by malicious actors, potentially leading to asset

loss, unauthorized data access, or unintended operational consequences.

8. Privacy Concerns

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All transactions on the blockchain are permanently recorded and publicly accessible, which can potentially expose user activities. Although addresses are pseudonoymous, the transparent and immutable nature of blockchain allows for advanced forensic analysis and intelligence gathering. This level of transparency can make it possible to link blockchain addresses to real-world identities over time, compromising user privacy.

9. Regulatory Uncertainty

The regulatory environment surrounding crypto-assets is constantly evolving, which can directly impact their usage, valuation, and legal status. Changes in regulatory frameworks may introduce new requirements related to consumer protection, taxation, and anti-money laundering compliance, creating uncertainty and potential challenges for investors and businesses operating in the crypto space. Although the crypto-asset do not create or confer any contractual or other obligations on any party, certain regulators may nevertheless qualify the crypto-asset as a security or other financial instrument under their applicable law, which in turn would have drastic consequences for the crypto-asset, including the potential loss of the invested capital in the asset. Furthermore, this could lead to the sellers and its affiliates, directors, and officers being obliged to pay fines, including federal civil and criminal penalties, or make the cryptoasset illegal or impossible to use, buy, or sell in certain jurisdictions. On top of that, regulators could take action against the issuer as well as the trading platforms if the the regulators view the token as an unregistered offering of securities or the operations otherwise as a violation of existing law. Any of these outcomes would negatively affect the value and/or functionality of the crypot-asset and/or could cause a complete loss of funds of the invested money in the crypto-asset for the investor.

10. Counterparty risk

Engaging in agreements or storing crypto-assets on exchanges introduces counterparty risks, including the failure of the other party to fulfill their obligations. Investors may face potential losses due to factors such as insolvency, regulatory non-compliance, or fraudulent activities by counterparties, highlighting the need for careful due diligence when engaging with third parties.

11. Reputational concerns

Crypto-assets are often subject to reputational risks stemming from associations with

illegal activities, high-profile security breaches, and technological failures. Such incidents

can undermine trust in the broader ecosystem, negatively affecting investor confidence

and market value, thereby hindering widespread adoption and acceptance.

12. Technological Innovation

New technologies or platforms could render the technology's design less competitive or

even break fundamental parts (i.e., quantum computing might break cryptographic

algorithms used to secure the network), impacting adoption and value. Participants

should approach the crypto-asset with a clear understanding of its speculative and

volatile nature and be prepared to accept these risks and bear potential losses, which

could include the complete loss of the asset's value.

13. Community and Narrative

As the crypto-asset has no intrinsic value, all trading activity is based on the intended

market value is heavily dependent on its community and the popularity of the

memecoin narrative. Declining interest or negative sentiment could significantly impact

the token's value.

14. Interest Rate Change

Historically, changes in interest, foreign exchange rates, and increases in volatility have

increased credit and market risks and may also affect the value of the crypto-asset.

Although historic data does not predict the future, potential investors should be aware

that general movements in local and other factors may affect the market, and this could

also affect market sentiment and, therefore most likely also the price of the crypto-

asset.

15. Taxation

The taxation regime that applies to the trading of the crypto-asset by individual holders

or legal entities will depend on the holder's jurisdiction. It is the holder's sole

responsibility to comply with all applicable tax laws, including, but not limited to, the

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reporting and payment of income tax, wealth tax, or similar taxes arising in connection

with the appreciation and depreciation of the crypto-asset.

16. Anti-Money Laundering/Counter-Terrorism Financing

It cannot be ruled out that crypto-asset wallet addresses interacting with the crypto-

asset have been, or will be used for money laundering or terrorist financing purposes,

or are identified with a person known to have committed such offenses.

17. Market Abuse

It is noteworthy that crypto-assets are potentially prone to increased market abuse

risks, as the underlying infrastructure could be used to exploit arbitrage opportunities

through schemes such as front-running, spoofing, pump-and-dump, and fraud across

different systems, platforms, or geographic locations. This is especially true for crypto-

assets with a low market capitalization and few trading venues, and potential investors

should be aware that this could lead to a total loss of the funds invested in the crypto-

asset.

18. Timeline and Milestones

Critical project milestones could be delayed by technical, operational, or market

challenges.

19. DAO Risks

The novel governance structure of a DAO, which has a significant influence on the

project, creates additional risks for investors. The DAO can make decisions that adversely

affect the investor.

I.4 Project implementation-related risks

As this white paper relates to the "Admission to trading" of the crypto-asset, the

implementation risk is referring to the risks on the Crypto Asset Service Providers side.

These can be, but are not limited to, typical project management risks, such as key-

personal-risks, timeline-risks, and technical implementation-risks.



I.5 Technology-related risks

As this white paper relates to the "Admission to trading" of the crypto-asset, the technology-related risks mainly involve the DLT networks, where the crypto asset is issued in.

1. Blockchain Dependency Risks

Network Downtime: Potential outages or congestion on the involved blockchains could interrupt on-chain token transfers, trading, and other functions.

2. Smart Contract Risks

Vulnerabilities: The smart contract governing the token could contain bugs or vulnerabilities that may be exploited, affecting token distribution or vesting schedules.

3. Wallet and Storage Risks

Private Key Management: Token holders must securely manage their private keys and recovery phrases to prevent permanent loss of access to their tokens, which includes Trading-Venues, who are a prominent target for dedicated hacks.

Compatibility Issues: The tokens require compatible wallets for storage and transfer. Any incompatibility or technical issues with these wallets could impact token accessibility.

4. Network Security Risks

Attack Risks: The blockchains may face threats such as denial-of-service (DoS) attacks or exploits targeting its consensus mechanism, which could compromise network integrity.

Centralization Concerns: Although claiming to be decentralized, the relatively smaller number of validators/concentration of stakes within the networks compared to other blockchains might pose centralization risks, potentially affecting network resilience.

5. Evolving Technology Risks: Technological Obsolescence: The fast pace of innovation in blockchain technology may make the used token standard appear less competitive or become outdated, potentially impacting the usability or adoption of the token.



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

happycat

S.4 Consensus Mechanism

The crypto-asset's Proof-of-Stake (PoS) consensus mechanism, introduced with The Merge in 2022, replaces mining with validator staking. Validators must stake at least 32 ETH every block a validator is randomly chosen to propose the next block. Once proposed the other validators verify the blocks integrity. The network operates on a slot and epoch system, where a new block is proposed every 12 seconds, and finalization occurs after two epochs (~12.8 minutes) using Casper-FFG. The Beacon Chain coordinates validators, while the fork-choice rule (LMD-GHOST) ensures the chain follows the heaviest accumulated validator votes. Validators earn rewards for proposing and verifying blocks, but face slashing for malicious behavior or inactivity. PoS aims to improve energy efficiency, security, and scalability, with future upgrades like Proto-Danksharding enhancing transaction efficiency.



S.5 Incentive Mechanisms and Applicable Fees

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.

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

2024-06-29

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

2025-06-29

S.8 Energy consumption

0.00001 kWh/a

S.9 Energy consumption sources and methodologies

The energy consumption of this asset is aggregated across multiple components:

To determine the energy consumption of a token, the energy consumption of the network Ethereum are calculated first. For the energy consumption of the token, a fraction of the energy consumption of the network is attributed to the token, which is determined based on the activity of the crypto-asset within the network. When calculating the energy consumption, the Functionally Fungible Group Digital Token Identifier (FFG DTI) is used - if available - to determine all implementations of the asset in scope. The mappings are updated regularly, based on data of the Digital Token Identifier Foundation. The information regarding the hardware used and the number of participants in the network is based on assumptions that are verified with best effort using empirical data. In general, participants are assumed to be largely economically

rational. As a precautionary principle, we make assumptions on the conservative side when in doubt, i.e. making higher estimates for the adverse impacts.

S.10 Renewable energy consumption

26.5386870830 %

S.11 Energy intensity

0.00009 kWh

S.12 Scope 1 DLT GHG emissions – Controlled

0.00000 tCO2e/a

S.13 Scope 2 DLT GHG emissions - Purchased

0.00001 tCO2e/a

S.14 GHG intensity

0.00003 kgCO2e

S.15 Key energy sources and methodologies

To determine the proportion of renewable energy usage, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from Our World in Data, see citation. The intensity is calculated as the marginal energy cost wrt. one more transaction.

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 GHG Emissions, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo- information is merged with public information from Our World in Data, see citation. The intensity is calculated as the marginal emission wrt. one more transaction.

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 Licenced under CC BY 4.0

