

# **White paper drafted under the European Markets in Crypto- Assets Regulation (EU) 2023/1114 for FFG 2HLT11X01**

# Preamble

## 00. Table of Contents

01. Date of notification..... 10

02. Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114 ..... 10

03. Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114 ..... 10

04. Statement in accordance with Article 6(5), points (a), (b), (c), of Regulation (EU) 2023/1114..... 10

05. Statement in accordance with Article 6(5), point (d), of Regulation (EU) 2023/1114.. 10

06. Statement in accordance with Article 6(5), points (e) and (f), of Regulation (EU) 2023/1114..... 11

Summary ..... 11

07. Warning in accordance with Article 6(7), second subparagraph, of Regulation (EU) 2023/1114..... 11

08. Characteristics of the crypto-asset ..... 11

09. Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability ..... 12

10. Key information about the offer to the public or admission to trading..... 12

Part A – Information about the offeror or the person seeking admission to trading..... 12

    A.1 Name ..... 12

    A.2 Legal form ..... 12

    A.3 Registered address ..... 12

    A.4 Head office ..... 13

    A.5 Registration date ..... 13

    A.6 Legal entity identifier ..... 13

    A.7 Another identifier required pursuant to applicable national law..... 13

A.8 Contact telephone number .....	13
A.9 E-mail address.....	13
A.10 Response time (Days) .....	13
A.11 Parent company .....	13
A.12 Members of the management body .....	13
A.13 Business activity .....	13
A.14 Parent company business activity .....	14
A.15 Newly established .....	14
A.16 Financial condition for the past three years .....	14
A.17 Financial condition since registration .....	14
Part B – Information about the issuer, if different from the offeror or person seeking admission to trading.....	15
B.1 Issuer different from offeror or person seeking admission to trading .....	15
B.2 Name.....	15
B.3 Legal form .....	15
B.4. Registered address.....	15
B.5 Head office.....	15
B.6 Registration date .....	16
B.7 Legal entity identifier .....	16
B.8 Another identifier required pursuant to applicable national law.....	16
B.9 Parent company .....	16
B.10 Members of the management body .....	16
B.11 Business activity .....	16
B.12 Parent company business activity .....	16
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.....	16
C.1 Name.....	16
C.2 Legal form .....	16
C.3 Registered address .....	16
C.4 Head office.....	17
C.5 Registration date .....	17
C.6 Legal entity identifier .....	17
C.7 Another identifier required pursuant to applicable national law.....	17
C.8 Parent company .....	17
C.9 Reason for crypto-Asset white paper Preparation .....	17
C.10 Members of the Management body .....	17
C.11 Operator business activity.....	17
C.12 Parent company business activity .....	17
C.13 Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114.....	17
C.14 Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114 .....	17
Part D – Information about the crypto-asset project .....	18
D.1 Crypto-asset project name .....	18
D.2 Crypto-assets name .....	18
D.3 Abbreviation .....	18
D.4 Crypto-asset project description .....	18
D.5 Details of all natural or legal persons involved in the implementation of the crypto-asset project .....	18
D.6 Utility Token Classification .....	20

D.7 Key Features of Goods/Services for Utility Token Projects .....	20
D.8 Plans for the token .....	20
D.9 Resource allocation .....	21
D.10 Planned use of Collected funds or crypto-Assets .....	21
Part E – Information about the offer to the public of crypto-assets or their admission to trading .....	21
E.1 Public offering or admission to trading .....	21
E.2 Reasons for public offer or admission to trading.....	21
E.3 Fundraising target .....	21
E.4 Minimum subscription goals .....	22
E.5 Maximum subscription goals .....	22
E.6 Oversubscription acceptance.....	22
E.7 Oversubscription allocation.....	22
E.8 Issue price .....	22
E.9 Official currency or any other crypto-assets determining the issue price .....	22
E.10 Subscription fee .....	22
E.11 Offer price determination method .....	22
E.12 Total number of offered/traded crypto-assets.....	22
E.13 Targeted holders.....	23
E.14 Holder restrictions.....	23
E.15 Reimbursement notice .....	23
E.16 Refund mechanism.....	23
E.17 Refund timeline .....	23
E.18 Offer phases.....	23
E.19 Early purchase discount.....	23
E.20 Time-limited offer.....	23

E.21 Subscription period beginning .....	23
E.22 Subscription period end.....	24
E.23 Safeguarding arrangements for offered funds/crypto- Assets.....	24
E.24 Payment methods for crypto-asset purchase .....	24
E.25 Value transfer methods for reimbursement.....	24
E.26 Right of withdrawal .....	24
E.27 Transfer of purchased crypto-assets .....	24
E.28 Transfer time schedule.....	24
E.29 Purchaser's technical requirements .....	24
E.30 Crypto-asset service provider (CASP) name .....	24
E.31 CASP identifier .....	25
E.32 Placement form .....	25
E.33 Trading platforms name.....	25
E.34 Trading platforms Market identifier code (MIC) .....	25
E.35 Trading platforms access .....	25
E.36 Involved costs.....	25
E.37 Offer expenses .....	25
E.38 Conflicts of interest.....	25
E.39 Applicable law .....	26
E.40 Competent court.....	26
Part F – Information about the crypto-assets .....	26
F.1 Crypto-asset type.....	26
F.2 Crypto-asset functionality.....	26
F.3 Planned application of functionalities .....	27
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 .....	27
F.4 Type of crypto-asset white paper .....	27
F.5 The type of submission .....	27
F.6 Crypto-asset characteristics.....	28
F.7 Commercial name or trading name.....	28
F.8 Website of the issuer .....	28
F.9 Starting date of offer to the public or admission to trading.....	28
F.10 Publication date.....	28
F.11 Any other services provided by the issuer .....	28
F.12 Language or languages of the crypto-asset white paper.....	28
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.....	28
F.14 Functionally fungible group digital token identifier, where available .....	28
F.15 Voluntary data flag.....	28
F.16 Personal data flag.....	29
F.17 LEI eligibility.....	29
F.18 Home Member State.....	29
F.19 Host Member States.....	29
Part G – Information on the rights and obligations attached to the crypto-assets .....	29
G.1 Purchaser rights and obligations.....	29
G.2 Exercise of rights and obligations.....	29
G.3 Conditions for modifications of rights and obligations .....	29
G.4 Future public offers.....	30
G.5 Issuer retained crypto-assets .....	30
G.6 Utility token classification .....	30

G.7 Key features of goods/services of utility tokens.....	30
G.8 Utility tokens redemption .....	30
G.9 Non-trading request .....	30
G.10 Crypto-assets purchase or sale modalities.....	31
G.11 Crypto-assets transfer restrictions .....	31
G.12 Supply adjustment protocols .....	31
G.13 Supply adjustment mechanisms .....	31
G.14 Token value protection schemes .....	31
G.15 Token value protection schemes description .....	31
G.16 Compensation schemes.....	31
G.17 Compensation schemes description.....	31
G.18 Applicable law.....	31
G.19 Competent court.....	32
Part H – information on the underlying technology .....	32
H.1 Distributed ledger technology (DTL) .....	32
H.2 Protocols and technical standards.....	32
H.3 Technology used.....	34
H.4 Consensus mechanism .....	36
H.5 Incentive mechanisms and applicable fees .....	36
H.6 Use of distributed ledger technology .....	38
H.7 DLT functionality description.....	38
H.8 Audit.....	38
H.9 Audit outcome .....	39
Part I – Information on risks .....	39
I.1 Offer-related risks.....	39



I.2 Issuer-related risks .....	41
I.3 Crypto-assets-related risks.....	42
I.4 Project implementation-related risks .....	47
I.5 Technology-related risks.....	47
I.6 Mitigation measures .....	48
Part J – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts .....	49
J.1 Adverse impacts on climate and other environment-related adverse impacts.....	49
S.1 Name .....	49
S.2 Relevant legal entity identifier .....	49
S.3 Name of the cryptoasset .....	49
S.4 Consensus Mechanism .....	49
S.5 Incentive Mechanisms and Applicable Fees .....	50
S.6 Beginning of the period to which the disclosure relates.....	51
S.7 End of the period to which the disclosure relates .....	51
S.8 Energy consumption.....	51
S.9 Energy consumption sources and methodologies .....	51
S.10 Renewable energy consumption .....	52
S.11 Energy intensity .....	52
S.12 Scope 1 DLT GHG emissions – Controlled .....	52
S.13 Scope 2 DLT GHG emissions – Purchased .....	52
S.14 GHG intensity.....	52
S.15 Key energy sources and methodologies.....	52
S.16 Key GHG sources and methodologies.....	52

## **01. Date of notification**

2025-10-15

## **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**

Since the token has multiple functions (hybrid token), these are already conceptually not utility tokens within the meaning of the MiCAR within the definition of Article 3, 1. (9), due to the necessity “exclusively” being intended to provide access to a good or a service supplied by its issuer only.

## **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 HSK tokens referred to in this white paper are crypto-assets other than EMTs and ARTs, and are issued on the HaskKey Chain and Ethereum network (2025-09-22 and according to DTI FFG shown in F.14) with a total number of 1,000,000,000 tokens.

The first activity on HaskKey Chain can be identified on 2024-12-16 (see transaction: <https://hashkey.blockscout.com/block/0x3fc7aebcc28e8161e13cc896f5e8ec43193ac79a2be59d8a44e521796b067d35>)

The first activity on Ethereum can be identified on 2024-09-13 (see transaction: <https://etherscan.io/tx/0x4aa419b1c01c67760c82ba82eeda4c8814166aa58635790358d0a7387e4f8c11>).

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

Not applicable.

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

This white paper concerns the admission to trading of the crypto-asset "HashKey Platform Token" by "HashKey Token Limited" 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.

The following platforms are in scope for this while drafting up this white paper: Payward Global Solutions Limited. Further platforms are also being sought for this purpose in the future.

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

### **A.1 Name**

HashKey Token Limited

### **A.2 Legal form**

LWXI

### **A.3 Registered address**

SG, 3 Church Street, #28-06, Samsung Hub, 049483

**A.4 Head office**

Not applicable.

**A.5 Registration date**

2022-11-10

**A.6 Legal entity identifier**

Not applicable

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

ACRA of Singapore: 202240026Z

**A.8 Contact telephone number**

+86 13764341413

**A.9 E-mail address**

Skylar@hashkey.com

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

030

**A.11 Parent company**

HashKey Digital Asset Group Limited

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

Name	Position	Address
Skylar Sha	Director	SG, 3 Church Street, #28-06, Samsung Hub, 049483
TF Cheng	Director	SG, 3 Church Street, #28-06, Samsung Hub, 049483

**A.13 Business activity**

The company is responsible for issuing the crypto-assets.

**A.14 Parent company business activity**

Established in 2018, HashKey is Asia's leading end-to-end digital asset financial services group. Operating within regulatory frameworks that uphold the highest compliance standard, HashKey Group offers diverse investment opportunities and tailored solutions across the digital asset ecosystem and Web3 landscape for retail investors, large institutions, family offices, funds, and professional and accredited investors. Headquartered in Hong Kong, HashKey Group operates in Singapore, Japan, and Bermuda.

**A.15 Newly established**

Yes

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

Not applicable.

**A.17 Financial condition since registration**

HashKey Token Limited is a Singapore public company limited by guarantee, incorporated without share capital or shareholders. Pursuant to its constitution, the immediate holding company, HashKey Digital Asset Group Limited ("HKDAG"), acts as its corporate guarantor and has undertaken to provide continuing financial support to HTL to enable the Company to meet its obligations as they fall due.

Since registration, HTL's financial condition reflects a strategic choice to prioritise ecosystem building, infrastructure development and compliance investments over short-term profitability. The Company operates under a strict compliance framework, which requires extensive regulatory and legal review for all partnerships and integrations, particularly with institutional and Web2 partners. This approach extends development timelines and raises costs but is intended to ensure long-term credibility and sustainability.

For the financial year ended 31 December 2024, HTL incurred a net loss of approximately USD 250,994 (2023: USD 2,642). As at that date, the Company's current and total liabilities exceeded its current and total assets by approximately USD 253,636 (2023: USD 2,642).

These results are consistent with the Company's reinvestment strategy, with resources allocated primarily to platform and ecosystem development.

HTL has not raised external financing directly. Instead, it benefits from the broader financial strength of HashKey Group, which successfully completed a USD 100 million Series A financing round in 2024 and operates licensed digital asset exchanges, custody, tokenisation, and investment businesses across multiple jurisdictions. This group support provides assurance of continued operations notwithstanding the Company's current net liability position.

Looking forward, HTL does not expect material adverse events impacting its ability to continue operations. The Company is positioned to benefit from growing adoption of HashKey Chain, increasing institutional engagement in Asia, and the progressive roll-out of HSK utilities, including exchange fee discounts, gas fees, governance features, staking, and custody integrations.

## **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**

No

### **B.2 Name**

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

**B.6 Registration date**

Not applicable.

**B.7 Legal entity identifier**

Not applicable.

**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**

Not applicable.

**B.11 Business activity**

Not applicable.

**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.

**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**

Crypto Risk Metrics GmbH, Lange Reihe 73, 20099 Hamburg

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

Crypto Risk Metrics GmbH, Lange Reihe 73, 20099 Hamburg, was mandated to support the process of drawing up the white paper by the person mentioned in Part A.

## Part D – Information about the crypto-asset project

### D.1 Crypto-asset project name

Long Name: "HashKey Platform Token", Short Name: "HSK" 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 2025-09-22).

### D.2 Crypto-assets name

Long Name: "HashKey Platform Token"

### D.3 Abbreviation

Short Name: "HSK"

### D.4 Crypto-asset project description

The HashKey Platform Token (HSK) is the ecosystem token issued by the HashKey Group. It is designed for use across the Group's regulated business lines, including licensed exchanges, investment management, tokenization solutions, and infrastructure services. HSK is structured as an ERC-20 token with a capped supply of one billion units. In addition, it functions as the native token of the HashKey Chain, a Layer-2 public blockchain. HSK is not distributed through private or public sales as a fundraising instrument but is intended to support long-term ecosystem development.

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

Name	Position	Address
HashKey Token Limited	Issuer	SG, 3 Church Street, #28-06, Samsung Hub, 049483
HashKey Exchange	Licensed virtual asset exchange in HK	HK, 9/F, Three Exchange Square, 8 Connaught Place, Central, Hong Kong

HashKey Global	Licensed digital asset trading services for global users	HK, 9/F, Three Exchange Square, 8 Connaught Place, Central, Hong Kong
HashKey Capital	Global asset manager investing in blockchain and digital assets	HK, 9/F, Three Exchange Square, 8 Connaught Place, Central, Hong Kong
HashKey Tokenisation	Tokenisation of various asset types	SG, 3 Church Street, #28-06, Samsung Hub, 049483
HashKey Chain	Blockchain solutions and ecosystem development	SG, 3 Church Street, #28-06, Samsung Hub, 049483
HashKey Cloud	Web3 infrastructure services	SG, 3 Church Street, #28-06, Samsung Hub, 049483
HashKey HashPass	Web3 identity and access solutions	HK, 9/F, Three Exchange Square, 8 Connaught Place, Central, Hong Kong
HashKey Wallet	Digital asset wallet services	HK, 9/F, Three Exchange Square, 8 Connaught Place, Central, Hong Kong
HashKey Digital Assets Group Limited	Support of the ecosystem	SG, 3 Church Street, #28-06, Samsung Hub, 049483
HashKey Holdings Limited	Support of the ecosystem	SG, 3 Church Street, #28-06, Samsung Hub, 049483
TF Cheng	Director of HashKey Token Limited	SG, 3 Church Street, #28-06, Samsung Hub, 049483

Sha Sha	Director of HashKey Token Limited	SG, 3 Church Street, #28-06, Samsung Hub, 049483
Zhu Minghua	Management Committee	SG, 3 Church Street, #28-06, Samsung Hub, 049483
Li Cheng	Management Committee	SG, 3 Church Street, #28-06, Samsung Hub, 049483
Zhang Jia Yin	Management Committee	SG, 3 Church Street, #28-06, Samsung Hub, 049483

#### **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**

The HSK token was introduced in 2023 as the native ecosystem token of the HashKey Group. Historical developments include the announcement of its initial allocation to ecosystem growth, team, and reserve categories, and the first release of tokens to support incentive programs. HSK has since been integrated into the HashKey Exchange and related ecosystem services, and initial mechanisms for ecosystem rewards and participation have been activated.

Looking ahead, the token is intended to further strengthen its role within the HashKey ecosystem, including its use across trading, tokenisation, infrastructure, and Web3 solutions. Future milestones may involve an expansion of incentive programmes, broader integration into tokenisation and blockchain services, and potential adjustments through repurchase or burn mechanisms.

Future outcomes depend on broader technological, regulatory, and market developments and cannot be predicted with certainty. Consequently, no assurances or guarantees can be given regarding the realization of such future developments.

## **D.9 Resource allocation**

As of the date of this white paper, the HSK token has been allocated across several categories to support ecosystem growth, operations, and long-term project sustainability. The total supply is fixed at 1,000,000,000 HSK. Of this amount, approximately 65% (650,000,000 HSK) has been designated for ecosystem growth, including community incentives, partnerships, and adoption-related initiatives. A further 30% (300,000,000 HSK) has been assigned to the team, while 5% (50,000,000 HSK) is reserved for future needs or contingencies.

It must be emphasized that vesting arrangements, staged releases, and potential repurchase or burn mechanisms can influence the effective circulating supply at any point in time. Consequently, the market-available quantity of tokens will not correspond to the full allocation from the outset, and distribution dynamics may change over time in ways that could affect market conditions and stakeholder exposure.

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

Not applicable, as this white paper was drawn up for the admission to trading and not for collecting funds 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 crypto asset is to be listed on the platforms: Payward Global Solutions Limited. Additional platforms aren't excluded in the future.

## **E.3 Fundraising target**

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

#### **E.4 Minimum subscription goals**

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

#### **E.5 Maximum subscription goals**

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

#### **E.6 Oversubscription acceptance**

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

#### **E.7 Oversubscription allocation**

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

#### **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**

The total supply of the crypto-asset is set at 1,000,000,000 units.

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

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

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

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

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

### **E.18 Offer phases**

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

### **E.19 Early purchase discount**

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

### **E.20 Time-limited offer**

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

### **E.21 Subscription period beginning**

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

**E.22 Subscription period end**

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

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

The payment methods are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

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

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

**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**

Payward Global Solutions Limited. Other platforms are also planned for future listing.

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

Payward Global Solutions Limited: PGSL.

Other platforms are also planned for future listing.

**E.35 Trading platforms access**

This depends on the trading platform listing the asset.

**E.36 Involved costs**

This depends on the trading platform listing the asset. Investors should always review the current fee structures of platforms before making trading decisions. 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 addressing, 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.

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**

The HSK token functions as the ecosystem token of the HashKey Group and is intended for use across its licensed exchanges, investment and asset management services, tokenisation activities, and blockchain infrastructure solutions. It also operates as the

native token of the HashKey Chain, serving as a medium for transaction fees within the network.

Within the ecosystem, HSK may be applied to receive trading fee discounts, participate in community and partner incentive programmes, and gain priority access to research, notifications, and selected products. Tokens are also used for monthly reward distributions to users, contributors, and institutional partners, based on trading activity and liquidity provision.

The actual scope of functionality depends on the continued development of the HashKey ecosystem, regulatory requirements, and business discretion. No assurances can be given that all or any of the described functionalities will remain available in the same form over time.

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

Looking ahead, the token is intended to further strengthen its role within the HashKey ecosystem, including its use across trading, tokenisation, infrastructure, and Web3 solutions. Future milestones may involve an expansion of incentive programmes, broader integration into tokenisation and blockchain services, and potential adjustments through repurchase or burn mechanisms.

Future outcomes depend on broader technological, regulatory, and market developments and cannot be predicted with certainty. Consequently, no assurances or guarantees can be given regarding the realization of such future developments.

## **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 "NEWT", which stands for new token.

**F.6 Crypto-asset characteristics**

The tokens are crypto-assets other than EMTs and ARTs, which are available on the HashKey Chain and Ethereum network. The tokens are fungible (up to 18 digits after the decimal point). The tokens are a digital representation of value, and have no inherent rights attached as well as no intrinsic utility.

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

HashKey Platform Token

**F.8 Website of the issuer**

<https://group.hashkey.com/en>

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

2025-11-13

**F.10 Publication date**

2025-11-13

**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**

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**

M1V3MZMLB; R3J1F23LB

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

2HLT11X01

**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**

Ireland

#### **F.19 Host Member States**

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, 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**

As the token grants neither rights nor obligations, there are no procedures and conditions for the exercise of these rights applicable.

#### **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. An adjustment of the technical infrastructure necessary to exercise the promised governance rights, declining functionality due to dilution, changing rights within the voting platforms, and all other adverse effects for investors may occur at any time.

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

This white paper refers to admission to trading. The issuer reserves the right to make further offers in the future. This means that future public offers cannot be ruled out, although there are no current plans to do so.

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

As of the date of this white paper, the HSK token has been allocated across several categories to support ecosystem growth, operations, and long-term project sustainability. The total supply is fixed at 1,000,000,000 HSK. Of this amount, approximately 65% (650,000,000 HSK) has been designated for ecosystem growth, including community incentives, partnerships, and adoption-related initiatives. A further 30% (300,000,000 HSK) has been assigned to the team, while 5% (50,000,000 HSK) is reserved for future needs or contingencies.

Taken together, the allocations to the team and reserve, amounting to approximately 35% of the total supply, may in a broader interpretation be considered issuer-retained assets.

It must be emphasized that vesting arrangements, staged releases, and potential repurchase or burn mechanisms can influence the effective circulating supply at any point in time. Consequently, the market-available quantity of tokens will not correspond to the full allocation from the outset, and distribution dynamics may change over time in ways that could affect market conditions and stakeholder exposure.

#### **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 this white paper is written to support admission to trading and not for the initial offer to the public.

#### **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 2025-09-19. 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.

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

For the crypto-asset in scope, the supply is limited to 1,000,000,000 tokens. Investors should note that changes in the token supply can have a negative impact.

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

No, the 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)**

The crypto asset that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum, 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 multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to HashKey Chain:

The crypto-asset operates on a set of protocols and technical standards designed to provide security, scalability, and interoperability within the HashKey ecosystem. It is running on the HashKey Chain, a Layer-2 public blockchain built to be compatible with the Ethereum Virtual Machine (EVM). Below are some of the key features:

#### **1. Network Protocols**

HashKey Chain inherits its core consensus and data availability from Ethereum through the OP Stack framework. While the network maintains its own sequencing and infrastructure components, block finality ultimately depends on Ethereum as the settlement layer. The chain is fully EVM-compatible, enabling the deployment and execution of smart contracts written in Solidity and related languages.

#### **2. Transaction and Address Standards**



Addresses follow the standard 20-byte Ethereum format (Keccak-256). The network supports common EVM transaction types, including transfers and contract deployments. Gas fees are paid in HSK.

### 3. Blockchain Data Structure & Block Standards

Account states and contracts are maintained using Merkle-based structures. Each block includes a header, transactions, and validator signatures. Block size is limited by a variable gas limit to balance throughput and stability.

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.

## **H.3 Technology used**

The crypto asset that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to Hashkey Chain:

1. HashKey Chain is an OP Stack-based Layer-2 network that extends Ethereum functionality while providing lower transaction costs and higher throughput. It maintains a distributed ledger of transactions and contract activity, while final settlement occurs on Ethereum.
2. Ledger and Data Management: Token balances, contract states, and transaction histories are recorded in a replicated ledger, designed to be tamper-resistant and verifiable.
3. User Access and Key Management: Control of assets on HashKey Chain depends on the secure storage of private keys and recovery phrases. Loss or compromise of these credentials can lead to permanent loss of access.

Cryptographic Methods: The network uses established standards for security, including ECDSA with the secp256k1 curve for digital signatures and Keccak-256 hashing for address generation and transaction integrity. These align HashKey Chain with Ethereum's cryptographic base, ensuring interoperability.

The following applies to Ethereum:

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 that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to Hashkey Chain:

HashKey Chain inherits its core consensus and data availability from Ethereum through the OP Stack framework. While the network maintains its own sequencing and infrastructure components, block finality ultimately depends on Ethereum as the settlement layer. The chain is fully EVM-compatible, enabling the deployment and execution of smart contracts written in Solidity and related languages.

The following applies to Ethereum:

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 that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating

crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to Hashkey Chain:

On HashKey Chain, transaction processing is incentivized through gas fees, which are denominated in HSK. Users pay gas fees when initiating transfers, deploying contracts, or interacting with decentralized applications. These fees are used to compensate network operators and sequencers that process and include transactions on the Layer-2 chain.

In addition, the HashKey ecosystem provides reward mechanisms linked to trading activity, liquidity provision, and ecosystem participation. These rewards may include periodic distributions of HSK tokens or fee discounts on affiliated platforms such as HashKey Exchange.

It should be noted that both gas fees and incentive mechanisms are subject to change over time, depending on network conditions, governance decisions, and broader regulatory or market developments. No assurance can be given that the fee levels or reward structures will remain constant in the future.

The following applies to Ethereum:

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**

Yes, DLT operated by the issuer, offeror, a person seeking admission to trading or a third-party acting on the issuer's their behalf. This applies only to implementations of HSK HashKeyChain Network.

The following applies to implementations on Ethereum:

No, DLT not operated by the issuer, offeror, a person seeking admission to trading or a third-party acting on the issuer's their behalf.

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

The following applies to HashKey Chain:

The system processes transactions through a sequencer that orders and batches them before submitting data to Ethereum for settlement and finality. This setup allows for reduced transaction costs and improved throughput while maintaining compatibility with the Ethereum Virtual Machine (EVM).

Although the sequencing process enables efficiency, it also introduces a degree of centralisation, as the sequencer is typically controlled by a limited set of operators. Security assurances and dispute resolution ultimately depend on the settlement layer provided by Ethereum. As a result, while the system is designed to function as a compliant and scalable distributed ledger, its performance and resilience remain dependent on both the operator of the sequencer and the underlying Ethereum mainnet.

## **H.8 Audit**

As we are understanding the question relating to "technology" to be interpreted in a broad sense, the answer to whether an audit of "the technology used" was conducted is that no guarantee can be given that all parts of the technology have been audited. This report focuses on risk, and it cannot be assured that each component of the underlying infrastructure, applications, and integrations has been subject to a full audit.

Nevertheless, certain parts of the technology, such as specific smart contracts or selected infrastructure modules, have undergone audits or external reviews. These measures, however, were limited in scope and point in time, and therefore cannot provide

comprehensive assurance for the overall system. Future risks, vulnerabilities, or changes in the technology stack may still arise, regardless of any audits conducted to date.

## **H.9 Audit outcome**

With reference to the information in H.8, results can be found here:  
[https://group.hashkey.com/\\_files/ugd/e9bfc2\\_12d0262e290741c78ceffa25851984c1.pdf](https://group.hashkey.com/_files/ugd/e9bfc2_12d0262e290741c78ceffa25851984c1.pdf)

## **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. 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 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.

### 7. Information asymmetry



Different groups of participants may not have the same access to technical details or governance information, leading to uneven decision-making and potential disadvantages for less informed investors.

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

### **1. Insolvency**

As with every other commercial endeavor, the risk of insolvency of entities involved in the project 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, entities involved in the project have most likely engaged in different business relationships with one or more third parties on which they and the network strongly depend on. Loss or changes in the leadership or key partners of entities involved in the project 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 entities involved in the project to be subject to private litigation. The aforementioned 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 business,

causing disruptions, financial losses, or reputational damage of entities involved in the project.

#### 5. Industry

The network and all entities involved in the project are and will be subject to all of the risks and uncertainties associated with a crypto-project, where the token issued has zero intrinsic value. History has shown that most of these projects resulted in financial losses for the investors and were only set-up to enrich a few insiders with the money from retail investors.

#### 6. Reputational

The network and all entities involved in the project face the risk of negative publicity, whether due to, without limitation, operational failures, security breaches, or association with illicit activities, which can damage the reputation of the network and all entities involved in the project 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 influenced 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.

### 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

All transactions on the blockchain are permanently recorded and publicly accessible, which can potentially expose user activities. Although addresses are pseudonymous, 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 crypto-asset illegal or impossible to use, buy, or sell in certain jurisdictions. On top of that, regulators could take action against the network and all entities involved in the project 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 cryptot-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 network'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.

#### 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 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. Legal ownership: Depending on jurisdiction, token holders may not have enforceable legal rights over their holdings, limiting avenues for recourse in disputes or cases of fraud.

20. Jurisdictional blocking: Access to exchanges, wallets, or interfaces may be restricted based on user location or regulatory measures, even if the token remains transferable on-chain.

21. Token concentration: A large proportion of tokens held by a few actors could allow price manipulation, governance dominance, or sudden sell-offs impacting market stability.

22. Ecosystem incentive misalignment: If validator, developer, or user rewards become unattractive or distorted, network security and participation could decline.

23. Governance deadlock: Poorly structured or fragmented governance processes may prevent timely decisions, creating delays or strategic paralysis.

24. Compliance misalignment: Features or delivery mechanisms may unintentionally conflict with evolving regulations, particularly regarding consumer protection or data privacy.

#### **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.

6. Bridges: The dependency on multiple ecosystems can negatively impact investors. This asset bridge creates corresponding risks for investors, as this lock-in mechanism may not function properly for technical reasons or may be subject to attack. In that case, the supply may change immediately or the ownership rights to tokens may be changed.

7. Forking risk: Network upgrades may split the blockchain into separate versions, potentially creating duplicate tokens or incompatibility between different versions of the protocol.

8. Economic abstraction: Mechanisms such as gas relayers or wrapped tokens may allow users to bypass the native asset, reducing its direct demand and weakening its economic role.

9. Dust and spam attacks: Low-value transactions may flood the network, increasing ledger size, reducing efficiency, and exposing user addresses to tracking.

10. Frontend dependency: If users rely on centralised web interfaces or wallets, service outages or compromises could block access even if the blockchain itself continues to operate.

## **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**

HashKey Token Limited

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

Not applicable.

#### **S.3 Name of the cryptoasset**

HashKey Platform Token

#### **S.4 Consensus Mechanism**

The crypto asset that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to Hashkey Chain:

HashKey Chain inherits its core consensus and data availability from Ethereum through the OP Stack framework. While the network maintains its own sequencing and infrastructure components, block finality ultimately depends on Ethereum as the settlement layer. The chain is fully EVM-compatible, enabling the deployment and execution of smart contracts written in Solidity and related languages.

The following applies to Ethereum:

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 that is the subject of this white paper is available on multiple DLT networks. These include: Hashkey Chain and Ethereum. In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

The following applies to Hashkey Chain:

On HashKey Chain, transaction processing is incentivized through gas fees, which are denominated in HSK. Users pay gas fees when initiating transfers, deploying contracts, or interacting with decentralized applications. These fees are used to compensate network operators and sequencers that process and include transactions on the Layer-2 chain.

In addition, the HashKey ecosystem provides reward mechanisms linked to trading activity, liquidity provision, and ecosystem participation. These rewards may include periodic distributions of HSK tokens or fee discounts on affiliated platforms such as HashKey Exchange.

It should be noted that both gas fees and incentive mechanisms are subject to change over time, depending on network conditions, governance decisions, and broader regulatory or market developments. No assurance can be given that the fee levels or reward structures will remain constant in the future.

The following applies to Ethereum:

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**

2024-09-18

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

2025-09-18

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

12162.35425 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 networks Ethereum and Hashkey Chain is 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**

32.7956468965%

### **S.11 Energy intensity**

0.00007 kWh

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

0.00000 tCO<sub>2</sub>e/a

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

4.04676 tCO<sub>2</sub>e/a

### **S.14 GHG intensity**

0.00000 kgCO<sub>2</sub>e

### **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.