Hey Anon (ANON)
White paper

In accordance with Title II of Regulation (EU) 2023/1114 (MiCA)

N	Field	Content
0	Table of content	

1mkraken

01		
	Date of notification	2025-06-12
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 operator of the trading platform 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 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 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	false
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. The crypto-asset referred to in this white paper is not covered by 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 admission to trading 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 (36) or any other offer document pursuant to Union or national law.
08	Characteristics of the crypto-asset	ANON is a governance token issued on Solana and bridged 1-for-1 to Ethereum (ERC-20) and other EVM chains via LayerZero. Holders may propose and vote on changes to Hey Anon's agent framework, treasury disbursements and protocol integrations, and freely transfer tokens on supported networks. It also provides benefits such as discounted access to AI agent services for token holders. ANON has a maximum supply of 21 000 000 distributed as follows: Category / Allocation table: ICO — 50% Team — 30% Foundation/Treasury — 20% ANON tokens are freely transferable, in whole or in part, to third parties, and all associated usage rights and obligations follow the token upon transfer.
09	Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability	N/A

The allocation table in row 08:

Category	Allocation
ICO	50%
Team	30%
Foundation/Treasury	20%

10	Key information about the offer to the public or admission to trading	Kraken seeks admission to trading of the ANON token so as to be compliant with MiCA and in keeping with its mission to make available for trading to its clients a wide range of assets.

Part I – Information on risks

I.1	Offer-Related Risks	**General Risk Factors Associated with Crypto-Asset Offerings** The admission to trading of crypto-assets, including ANON, is subject to general risks inherent to the broader cryptocurrency market. **Market Volatility** The value of ANON may experience substantial fluctuations driven by investor sentiment, macroeconomic developments, and market conditions. **Regulatory Risks** Changes in legislation, applicable laws, compliance requirements or the implementation of new regulatory frameworks could affect the availability, trading, or use of such assets. **Security Risks** The risk of exploitation, hacking or security vulnerabilities of the underlying protocol and/or contracts of the token leading to a loss. **Reputational Risks** The potential for damage to an organization's credibility or public trust, which can negatively impact stakeholder confidence and overall business viability.
I.2	Issuer-Related Risks	**Legal and Regulatory Risks** Because the project is not operated by a publicly disclosed registered company, there is no clear legal entity accountable for ANON. This could pose challenges if regulatory authorities seek compliance or if disputes arise, as holders might have limited recourse. Furthermore, changes in laws or enforcement could impact the project's ability to operate if it cannot meet regulatory requirements due to its decentralized structure. **Key Personnel and Dependency on Core Team** The development of Hey Anon relies on a small number of key developers and leaders (the founding team and core engineers). The departure of one or more important team members, or any internal team issues, could adversely affect the project's progress and success.

		Jurisdictional Uncertainty The issuer's jurisdiction and applicable legal obligations have not been publicly disclosed; this uncertainty may pose administrative hurdles and affect access to banking or other services.
I.3	Crypto-Assets-related Risks	**Market Volatility** The crypto-asset market is subject to significant price volatility, which may affect the value of ANON. Prices can fluctuate rapidly and unpredictably due to various factors, including market sentiment, economic indicators, technological developments, regulatory news, and macroeconomic trends. This high level of volatility may lead to sudden gains or losses and can impact the liquidity and tradability of the crypto-asset. **Liquidity** Liquidity refers to the ability to buy or sell a crypto-asset without causing significant price impact. ANON may experience periods of low liquidity, meaning that it could be difficult to enter or exit positions at desired prices or volumes. Reduced liquidity may result from limited market participation, exchange restrictions, or broader market conditions. This can lead to increased price volatility, slippage, and difficulty in executing transactions. **Cybersecurity & Technology Risks** Risks arising from vulnerabilities in the blockchain technology used by the project or platforms. Example risks include smart contract exploits, compromise of platforms, forking scenarios, compromise of cryptographic algorithms. **Adoption Risks** The risk associated with the project not achieving its goals leading to lower than expected adoption and use within the ecosystem, the impact leading to a reduced utility and value proposition. **Custody & Ownership Risk** The risk related to the inadequate safekeeping and control of crypto-assets e.g. loss of private keys, custodian insolvency leading to a loss. **Token Concentration Risk** The team holds 30% of the total supply. If the team chooses to sell their tokens, it could put downward pressure on the market price and reduce confidence. Moreover, large holders could potentially exert outsized influence on governance if they stake their tokens (though governance processes are one-token-one-vote, high concentration can skew decisions).

I.4	Project Implementation-Related Risks	**Development Delays or Shortfalls** There is a risk that some promised features or improvements could be delayed, scaled back, or not achieved, which would impact the platform's functionality and the perceived value of ANON. **Adoption and User Growth** The utility of ANON is tied to the success of the HeyAnon platform. If the platform fails to attract or retain a robust user base, community engagement may remain low. For instance, insufficient user participation in the Anon DAO's governance or low usage of HeyAnon's AI agent could undermine the token's purpose and demand. **Partnership and Ecosystem Risk** HeyAnon's strategy relies on integrating with various DeFi protocols and networks. Failure to establish or maintain these integrations (due to technical, commercial, or strategic reasons) could reduce the platform's attractiveness and limit ANON's use cases.
I.5	Technology-Related Risks	**Smart contract risks** ANON uses smart contracts to facilitate automated transactions and processes. While these contracts enhance efficiency and decentralization, they also introduce specific technical risks. Vulnerabilities such as coding errors, design flaws, or security loopholes within the smart contract code may be exploited by malicious actors. Such exploits could result in the loss of assets, unauthorized access to sensitive information, or unintended and irreversible execution of transactions. **Blockchain Network Risks** ANON operates on a public blockchain infrastructure, which is maintained by a decentralized network of participants. The functionality and reliability of the crypto-asset are dependent on the performance and security of the underlying blockchain. Risks may include network congestion, high transaction fees, delayed processing times, or, in extreme cases, outages and disruptions. Additionally, vulnerabilities or failures in the consensus mechanism, attacks on the network (e.g., 51% attacks), or protocol-level bugs could impact the operation and availability of ANON. **Risk of Cryptographic Vulnerabilities** Technological advancements, such as quantum computing, could pose potential risks to cryptocurrencies. **Privacy** Transactions involving ANON are recorded on a public blockchain, where transaction data is transparent and permanently accessible. While public

I.6		addresses do not directly reveal personal identities, transaction histories can be analyzed and, in some cases, linked to individuals through data aggregation or external information sources. This transparency may pose privacy concerns for users seeking confidentiality in their financial activity. Participants should be aware that transaction data on public blockchains is not inherently private and could be subject to scrutiny by third parties, including regulators, analytics firms, or malicious actors. **Reliance on Third-Party Infrastructure** HeyAnon and ANON rely on underlying blockchain infrastructure and bridging technology. For example, ANON uses LayerZero's Omnichain Fungible Token protocol to operate across Ethereum and Solana. If the LayerZero bridge, Ethereum, or Solana encounter performance problems or security breaches, ANON holders could face issues transferring tokens between chains or using platform features. **Scalability and Performance** As usage grows, the HeyAnon platform must scale its backend services (AI processing, data aggregation servers, etc.). Failure to do so could lead to downtime or degraded performance, undermining user confidence. Significant outages or data inaccuracies can erode trust in the platform and, by extension, the value of ANON. **Regulatory Environment** Changes in technology-related regulations (for instance, new rules on AI usage in financial services or stricter crypto transaction compliance) could force modifications to HeyAnon's operations. Such changes might increase development costs or limit certain functionalities, indirectly affecting ANON's utility and attractiveness.
I.6	Mitigation measures	**Use of Established Standards** ANON is implemented using well-tested token standards (SPL on Solana and ERC20 on Ethereum) which has been widely used and vetted. By adhering to a standard protocol and not using unproven custom code where unnecessary, the project reduces the likelihood of unknown bugs. **Community Governance** Hey Anon's governance system enables stakeholders to vote on proposals. While not a technical safeguard, governance serves as an adaptive mechanism to mitigate long-term systemic and coordination risks.

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

A.1	Name	N/A
A.2	Legal form	N/A
A.3	Registered address	N/A
A.4	Head office	N/A
A.5	Registration Date	N/A
A.6	Legal entity identifier	N/A
A.7	Another identifier required pursuant to applicable national law	N/A
A.8	Contact telephone number	N/A
A.9	E-mail address	N/A
A.10	Response Time (Days)	N/A
A.11	Parent Company	N/A
A.12	Members of the Management body	N/A

A.13	Business Activity	N/A
A.14	Parent Company Business Activity	N/A
A.15	Newly Established	N/A
A.16	Financial condition for the past three years	N/A
A.17	Financial condition since registration	N/A

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	true
B.2	Name	Not available
B.3	Legal form	Not available
B.4	Registered address	Not available
B.5	Head office	Not available
B.6	Registration Date	Not available

B.7	Legal entity identifier	Not available
B.8	Another identifier required pursuant to applicable national law	Not available
B.9	Parent Company	Not available
B.10	Members of the Management body	Not available
B.11	Business Activity	Not available
B.12	Parent Company Business Activity	Not available

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	Payward Global Solutions LTD
C.2	Legal form	N/A
C.3	Registered address	N/A
C.4	Head office	N/A
C.5	Registration Date	11-07-2023

C.6	Legal entity identifier of the operator of the trading platform	9845003D98SCC2851458		
C.7	Another identifier required pursuant to applicable national law	N/A		
C.8	Parent Company	N/A		
C.9	Reason for Crypto-Asset White Paper Preparation	Kraken seeks admission to trading of the ANON token so as to be compliant with MiCA and in keeping with its mission to make available for trading to its clients a wide range of assets.		

C.10	Members of the Management body			
		Full Name	**Business Address**	**Function**
		Shannon Kurtas	70 Sir John Rogerson's Quay, Dublin 2, Ireland	Board Member
		Andrew Mulvenny	70 Sir John Rogerson's Quay, Dublin 2, Ireland	Board Member
		Shane O'Brien	70 Sir John Rogerson's Quay, Dublin 2, Ireland	Board Member
		Laura Walsh	70 Sir John Rogerson's Quay, Dublin 2, Ireland	Board Member
		Michael Walsh	70 Sir John Rogerson's Quay, Dublin 2, Ireland	Board Member

C.11	Operator Business Activity	PGSL is the operator of a Trading Platform for Crypto Assets, in accordance with Article 3(1)(18) of Regulation (EU) 2023/1114 (MiCA).
C.12	Parent Company Business Activity	Payward, Inc., a Delaware, USA corporation, is the parent company of a worldwide group of subsidiaries (the following paragraphs use the term "Payward" or "Payward Group" to refer to the group) collectively doing business as "Kraken." Payward's primary business is the operation of an online virtual

		asset platform that enables clients to buy and sell virtual assets on a spot basis, including the transfer of crypto-assets to and from external wallets. Payward, through its various affiliates, offers a number of other services and products, including: * A trading platform for futures contracts on virtual assets ("Kraken Derivatives"); * A platform for buying and selling NFTs; * An over-the-counter ("OTC") desk; * Extensions of margin to support spot trading of virtual assets; * A benchmark administrator; and * Staking services.
C.13	Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114	N/A
C.14	Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114	N/A

Part D- Information about the crypto-asset project

D.1	Crypto-asset project name	Hey Anon
D.2	Crypto-assets name	Hey Anon

D.3	Abbreviation	ANON
D.4	Crypto-asset project description	HeyAnon is an AI-powered platform that combines conversational AI with real-time data aggregation to simplify DeFi interactions. Through natural language prompts, users can execute complex transactions (bridging, swapping, staking, etc.) and receive insights from multiple on-chain and off-chain data sources. The project's goal is to democratize DeFi by automating workflows and centralizing information, thereby lowering barriers to entry for users.
D.5	Details of all natural or legal persons involved in the implementation of the crypto-asset project	HeyAnon was co-founded by Daniele Sestagalli. The development team and community contributors (collectively "Anon DAO") drive the platform's implementation and governance.
D.6	Utility Token Classification	false
D.7	Key Features of Goods/Services for Utility Token Projects	N/A
D.8	Plans for the token	HeyAnon launched its platform in late 2024, and ANON distribution commenced with the public token sale in Dec 2024. Please refer to the project team website for any further information regarding future milestones.
D.9	Resource Allocation	50% of ANON was sold to the community (providing development funds), while 30% is reserved for the team and 20% for the foundation/treasury.
D.10	Planned Use of Collected Funds or Crypto-Assets	The treasury funds will be used for (i) subsidizing the AI agent services for token holders, (ii) recruiting engineers to build a custom Light LLM AI model (iii) securing compute power to reduce dependency on external providers and token-based costs and (iv) providing financial support to teams that choose to build using their framework.
	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	ATTR
E.2	Reasons for Public Offer or Admission to trading	Making secondary trading available to the consumers on the Kraken Trading platform in compliance with the MiCA regulatory framework
E.3	Fundraising Target	N/A
E.4	Minimum Subscription Goals	N/A
E.5	Maximum Subscription Goal	N/A
E.6	Oversubscription Acceptance	N/A
E.7	Oversubscription Allocation	N/A
E.8	Issue Price	N/A
E.9	Official currency or other crypto-assets determining the issue price	N/A
E.10	Subscription fee	N/A

E.11	Offer Price Determination Method	N/A
E.12	Total Number of Offered/Traded crypto-assets	21 000 000 maximum supply
E.13	Targeted Holders	ALL
E.14	Holder restrictions	N/A
E.15	Reimbursement Notice	N/A
E.16	Refund Mechanism	N/A
E.17	Refund Timeline	N/A
E.18	Offer Phases	N/A
E.19	Early Purchase Discount	N/A
E.20	time-limited offer	N/A
E.21	Subscription period beginning	N/A
E.22	Subscription period end	N/A

E.23	Safeguarding Arrangements for Offered Funds/crypto-assets	N/A
E.24	Payment Methods for crypto-asset Purchase	N/A
E.25	Value Transfer Methods for Reimbursement	N/A
E.26	Right of Withdrawal	N/A
E.27	Transfer of Purchased crypto-assets	N/A
E.28	Transfer Time Schedule	N/A
E.29	Purchaser's Technical Requirements	N/A
E.30	crypto-asset service provider (CASP) name	N/A
E.31	CASP identifier	N/A
E.32	Placement form	NTAV

E.33	Trading Platforms name	N/A
E.34	Trading Platforms Market Identifier Code (MIC)	N/A
E.35	Trading Platforms Access	N/A
E.36	Involved costs	N/A
E.37	Offer Expenses	N/A
E.38	Conflicts of Interest	All listings decisions made by Payward Global Solution Ltd are made independently by staff of the entity in line with internal policies. PGSL publishes a conflicts of interest disclosure on its website advising of potential conflicts that may arise.
E.39	Applicable law	Any dispute relating to this white paper shall be governed by and construed and enforced in accordance with the laws of Ireland without regard to conflict of law rules or principles (whether of Ireland or any other jurisdiction) that would cause the application of the laws of any other jurisdiction, irrespective of whether ANON tokens qualify as right or property under the applicable law.
E.40	Competent court	Any disputes or claims arising out of this white paper will be subject to the exclusive jurisdiction of the Irish courts.

Part F - Information about the crypto-assets

F.1	Crypto-Asset Type	ANON is classified as a crypto-asset other than an asset referenced token or e-money token under MiCA, (EU) 2023/1114.
F.2	Crypto-Asset Functionality	ANON serves as the governance token of the HeyAnon platform, enabling holders to vote on project decisions and influence feature development. Additionally, holding ANON confers benefits within the ecosystem, such as privileged or discounted access to HeyAnon's AI-driven services.

F.3	Planned Application of Functionalities	All core functionalities are already live.

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 white paper	OTHR
F.5	The type of submission	NEWT
F.6	Crypto-Asset Characteristics	ANON allows holders to access AI agent services and voting rights in the Hey Anon ecosystem, and transfer their tokens freely.
F.7	Commercial name or trading name	Not available
F.8	Website of the issuer	https://heyanon.ai/
F.9	Starting date of offer to the public or admission to trading	2024-12-28
F.10	Publication date	2025-07-10
F.11	Any other services provided by the issuer	N/A

F.12	Identifier of operator of the trading platform	PGSL
F.13	Language or languages of the white paper	English
F.14	Digital Token Identifier	Not available
F.15	Functionally Fungible Group Digital Token Identifier	N/A
F.16	Voluntary data flag	Mandatory
F.17	Personal data flag	true
F.18	LEI eligibility	N/A
F.19	Home Member State	Ireland
F.20	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	**Rights of ANON Holders:** By holding ANON, purchasers gain participation rights in HeyAnon's governance (ability to vote on Anon DAO initiatives) and enjoy platform-related benefits (such as free or discounted AI agent services).

		Obligations of ANON Holders: There are no mandatory obligations imposed on ANON purchasers beyond the general terms of use of the platform. **Transferability and Trading:** Holders have the ability to transfer their ANON tokens to others (on-chain) or to trade them on available markets at will. Ownership of ANON carries with it the aforementioned access rights, and when a token is transferred, those rights pass to the new holder. The previous holder loses access once they no longer hold the token. This means all rights (which are usage rights) are fully transferable with the token.
G.2	Exercise of Rights and obligations	Holders exercise their rights by interfacing with the HeyAnon platforms. For governance, an ANON holder connects their wallet to the governance portal to cast votes on proposals. For service benefits, holding ANON in a wallet linked to the HeyAnon application automatically grants the corresponding access privileges (e.g., fee discounts or premium features) without additional action beyond maintaining the token balance.
G.3	Conditions for modifications of rights and obligations	The rights and obligations attached to ANON as described in this white paper reflect information available at the time of issuance. This white paper is issued by Kraken and does not constitute a commitment or guarantee by Hey Anon or any other party regarding future modifications. No promises, warranties, or assurances are made herein regarding future token functionality, and this section is provided solely for informational purposes.
G.4	Future Public Offers	No future offerings have been announced by the project team.
G.5	Issuer Retained Crypto-Assets	The HeyAnon team and associated entities collectively retained 10 500 000 ANON (50% of the total 21 000 000 supply) after the initial public sale. This includes approximately 6,300,000 ANON (30%) allocated to team members and 4,200,000 ANON (20%) allocated to the project's foundation/treasury for ecosystem development.
G.6	Utility Token Classification	false
G.7	Key Features of Goods/Services of Utility Tokens	N/A

G.8	Utility Tokens Redemption	N/A
G.9	Non-Trading request	This white paper reflects a request to admit the token to trading.
G.10	Crypto-Assets purchase or sale modalities	N/A
G.11	Crypto-Assets Transfer Restrictions	Kraken may, in accordance with applicable laws and internal policies and terms, impose restrictions on buyers and sellers of these tokens.
G.12	Supply Adjustment Protocols	false
G.13	Supply Adjustment Mechanisms	N/A
G.14	Token Value Protection Schemes	false
G.15	Token Value Protection Schemes Description	N/A
G.16	Compensation Schemes	false
G.17	Compensation Schemes Description	N/A
G.18	Applicable law	Any dispute relating to this white paper shall be governed by and construed and enforced in accordance with the laws of Ireland without regard to conflict of law

		rules or principles (whether of Ireland or any other jurisdiction) that would cause the application of the laws of any other jurisdiction, irrespective of whether ANON tokens qualify as right or property under the applicable law.
G.19	Competent court	Any disputes or claims arising out of this white paper will be subject to the exclusive jurisdiction of the Irish courts.

Part H – information on the underlying technology

H.1	Distributed ledger technology	ANON is implemented on Solana and Ethereum. Solana is a public blockchain that uses a combination of Proof-of-Stake (PoS) and Proof-of-History (PoH) for consensus. Ethereum is a public, open-access blockchain that reaches consensus through Proof-of-Stake (PoS). These technologies ensure that ANON transactions can be recorded, validated, and secured in a decentralized manner.
H.2	Protocols and technical standards	The ANON token is based on the Ethereum and Solana protocols, which utilize decentralized Distributed-Ledger Technology. These protocols provide the foundation for secure transactions and smart contracts. ERC20 Token Standard: The ERC20 standard is a technical protocol for issuing and managing tokens, ensuring that the ANON token is compatible with most wallets, exchanges, and decentralized applications (DApps). The SPL standard is a technical protocol for issuing and managing tokens, ensuring that the ANON token is compatible with most wallets, exchanges, and decentralized applications (DApps).
H.3	Technology Used	The ANON token uses the existing SPL token standard on Solana and the existing ERC20 standard on Ethereum.
H.4	Consensus Mechanism	Solana uses Proof-of-Stake with Tower BFT and Proof-of-History, where leaders are pre-selected by stake and transactions, including ANON transfers, receive sub-second confirmation and high throughput. Ethereum uses a Proof-of-Stake (PoS) consensus mechanism, where validators are selected based on ETH stake to propose and attest to new blocks.

		Transactions on Ethereum typically take 12 seconds, with strong decentralization and security guarantees.
H.5	Incentive Mechanisms and Applicable Fees	ANON relies on the existing incentive mechanisms and fee structures of the Ethereum and Solana blockchains.
H.6	Use of Distributed Ledger Technology	false
H.7	DLT Functionality Description	N/A
H.8	Audit	false
H.9	Audit outcome	N/A
Part J - Information on the suitability indicators in relation to adverse impact on the climate and other environment-related adverse impacts		
S.1	Name	Payward Global Solutions Limited
S.2	Relevant legal entity identifier	9845003D98SCC2851458
S.3	Name of the crypto-asset	anon
S.4	Consensus Mechanism	anon is present on the following networks: Arbitrum, Base, Binance Smart Chain, Ethereum, Solana. Arbitrum is a Layer 2 solution on top of Ethereum that uses Optimistic Rollups to enhance scalability and reduce transaction costs. It assumes that transactions are valid by default and only verifies them if there's a challenge (optimistic). Core Components: - Sequencer: Orders transactions and creates batches for processing. - Bridge: Facilitates asset transfers between Arbitrum and Ethereum. - Fraud Proofs: Protect against invalid transactions through an interactive verification process.

Verification Process:
1. Transaction Submission: Users submit transactions to the Arbitrum Sequencer, which orders and batches them.
2. State Commitment: These batches are submitted to Ethereum with a state commitment.
3. Challenge Period: Validators have a specific period to challenge the state if they suspect fraud.
4. Dispute Resolution: If a challenge occurs, the dispute is resolved through an iterative process to identify the fraudulent transaction. The final operation is executed on Ethereum to determine the correct state.
5. Rollback and Penalties: If fraud is proven, the state is rolled back, and the dishonest party is penalized.

Security and Efficiency: The combination of the Sequencer, bridge, and interactive fraud proofs ensures that the system remains secure and efficient. By minimizing on-chain data and leveraging off-chain computations, Arbitrum can provide high throughput and low fees.

Base is a Layer-2 (L2) solution on Ethereum that was introduced by Coinbase and developed using Optimism's OP Stack. L2 transactions do not have their own consensus mechanism and are only validated by the execution clients. The so-called sequencer regularly bundles stacks of L2 transactions and publishes them on the L1 network, i.e. Ethereum. Ethereum's consensus mechanism (Proof-of-stake) thus indirectly secures all L2 transactions as soon as they are written to L1.

Binance Smart Chain (BSC) uses a hybrid consensus mechanism called Proof of Staked Authority (PoSA), which combines elements of Delegated Proof of Stake (DPoS) and Proof of Authority (PoA). This method ensures fast block times and low fees while maintaining a level of decentralization and security.

Core Components:

1. Validators (so-called "Cabinet Members"): Validators on BSC are responsible for producing new blocks, validating transactions, and maintaining the network's security. To become a validator, an entity must stake a significant amount of BNB (Binance Coin). Validators are selected through staking and voting by token holders. There are 21 active validators at any given time, rotating to ensure decentralization and security.
2. Delegators: Token holders who do not wish to run validator nodes can delegate their BNB tokens to validators. This delegation helps validators increase their stake and improves their chances of being selected to

produce blocks. Delegators earn a share of the rewards that validators receive, incentivizing broad participation in network security.

3. Candidates: Candidates are nodes that have staked the required amount of BNB and are in the pool waiting to become validators. They are essentially potential validators who are not currently active but can be elected to the validator set through community voting. Candidates play a crucial role in ensuring there is always a sufficient pool of nodes ready to take on validation tasks, thus maintaining network resilience and decentralization. Consensus Process

4. Validator Selection: Validators are chosen based on the amount of BNB staked and votes received from delegators. The more BNB staked and votes received, the higher the chance of being selected to validate transactions and produce new blocks. The selection process involves both the current validators and the pool of candidates, ensuring a dynamic and secure rotation of nodes.

5. Block Production: The selected validators take turns producing blocks in a PoA-like manner, ensuring that blocks are generated quickly and efficiently. Validators validate transactions, add them to new blocks, and broadcast these blocks to the network.

6. Transaction Finality: BSC achieves fast block times of around 3 seconds and quick transaction finality. This is achieved through the efficient PoSA mechanism that allows validators to rapidly reach consensus. Security and Economic Incentives

7. Staking: Validators are required to stake a substantial amount of BNB, which acts as collateral to ensure their honest behavior. This staked amount can be slashed if validators act maliciously. Staking incentivizes validators to act in the network's best interest to avoid losing their staked BNB.

8. Delegation and Rewards: Delegators earn rewards proportional to their stake in validators. This incentivizes them to choose reliable validators and participate in the network's security. Validators and delegators share transaction fees as rewards, which provides continuous economic incentives to maintain network security and performance.

9. Transaction Fees: BSC employs low transaction fees, paid in BNB, making it cost-effective for users. These fees are collected by validators as part of their rewards, further incentivizing them to validate transactions accurately and efficiently.

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. Solana uses a unique combination of Proof of History (PoH) and Proof of Stake (PoS) to achieve high throughput, low latency, and robust security.

Core Concepts:
1. Proof of History (PoH):
    - Time-Stamped Transactions: PoH is a cryptographic technique that timestamps transactions, creating a historical record that proves that an event has occurred at a specific moment in time.
    - Verifiable Delay Function: PoH uses a Verifiable Delay Function (VDF) to generate a unique hash that includes the transaction and the time it was processed. This sequence of hashes provides a verifiable order of events, enabling the network to efficiently agree on the sequence of transactions.
2. Proof of Stake (PoS):
    - Validator Selection: Validators are chosen to produce new blocks based on the number of SOL tokens they have staked. The more tokens staked, the higher the chance of being selected to validate transactions and produce new blocks.
    - Delegation: Token holders can delegate their SOL tokens to validators, earning rewards proportional to their stake while enhancing the network's security.

Consensus Process:
1. Transaction Validation:
    Transactions are broadcast to the network and collected by validators. Each transaction is validated to ensure it meets the network's criteria, such as having correct signatures and sufficient funds.
2. PoH Sequence Generation:
    A validator generates a sequence of hashes using PoH, each containing a timestamp and the previous hash. This process creates a historical record of transactions, establishing a cryptographic clock for the network.
3. Block Production:
    The network uses PoS to select a leader validator based on their stake. The leader is responsible for bundling the validated

| | | transactions into a block. The leader validator uses the PoH sequence to order transactions within the block, ensuring that all transactions are processed in the correct order.

4. Consensus and Finalization:
    Other validators verify the block produced by the leader validator. They check the correctness of the PoH sequence and validate the transactions within the block. Once the block is verified, it is added to the blockchain. Validators sign off on the block, and it is considered finalized.

Security and Economic Incentives:

1. Incentives for Validators:
   - Block Rewards: Validators earn rewards for producing and validating blocks. These rewards are distributed in SOL tokens and are proportional to the validator's stake and performance.
   - Transaction Fees: Validators also earn transaction fees from the transactions included in the blocks they produce. These fees provide an additional incentive for validators to process transactions efficiently.
2. Security:
   - Staking: Validators must stake SOL tokens to participate in the consensus process. This staking acts as collateral, incentivizing validators to act honestly. If a validator behaves maliciously or fails to perform, they risk losing their staked tokens.
   - Delegated Staking: Token holders can delegate their SOL tokens to validators, enhancing network security and decentralization. Delegators share in the rewards and are incentivized to choose reliable validators.
3. Economic Penalties:
   Slashing: Validators can be penalized for malicious behavior, such as double-signing or producing invalid blocks. This penalty, known as slashing, results in the loss of a portion of the staked tokens, discouraging dishonest actions. |
| S.5 | Incentive Mechanisms and Applicable Fees | anon is present on the following networks: Arbitrum, Base, Binance Smart Chain, Ethereum, Solana.

Arbitrum One, a Layer 2 scaling solution for Ethereum, employs several incentive mechanisms to ensure the security and integrity of transactions on its network. The key mechanisms include:

1. Validators and Sequencers: |

- Sequencers are responsible for ordering transactions and creating batches that are processed off-chain. They play a critical role in maintaining the efficiency and throughput of the network.
- Validators monitor the sequencers' actions and ensure that transactions are processed correctly. Validators verify the state transitions and ensure that no invalid transactions are included in the batches.

2. Fraud Proofs:
- Assumption of Validity: Transactions processed off-chain are assumed to be valid. This allows for quick transaction finality and high throughput.
- Challenge Period: There is a predefined period during which anyone can challenge the validity of a transaction by submitting a fraud proof. This mechanism acts as a deterrent against malicious behavior.
- Dispute Resolution: If a challenge is raised, an interactive verification process is initiated to pinpoint the exact step where fraud occurred. If the challenge is valid, the fraudulent transaction is reverted, and the dishonest actor is penalized.

3. Economic Incentives:
- Rewards for Honest Behavior: Participants in the network, such as validators and sequencers, are incentivized through rewards for performing their duties honestly and efficiently. These rewards come from transaction fees and potentially other protocol incentives.
- Penalties for Malicious Behavior: Participants who engage in dishonest behavior or submit invalid transactions are penalized. This can include slashing of staked tokens or other forms of economic penalties, which serve to discourage malicious actions.

Fees on the Arbitrum One Blockchain

1. Transaction Fees:
- Layer 2 Fees: Users pay fees for transactions processed on the Layer 2 network. These fees are typically lower than Ethereum mainnet fees due to the reduced computational load on the main chain.
- Arbitrum Transaction Fee: A fee is charged for each transaction processed by the sequencer. This fee covers the cost of processing the transaction and ensuring its inclusion in a batch.

2. L1 Data Fees:
- Posting Batches to Ethereum: Periodically, the state updates from the Layer 2 transactions are posted to the Ethereum mainnet as calldata. This involves a fee, known as the L1 data fee, which accounts for the gas required to publish these state updates on Ethereum.
- Cost Sharing: Because transactions are batched, the fixed costs of posting state updates to Ethereum are spread across multiple transactions, making it more cost-effective for users.

Base is a Layer-2 (L2) solution on Ethereum that uses optimistic rollups provided by the OP Stack on which it was developed. Transaction on base are bundled by a, so called, sequencer and the result is regularly submitted as an Layer-1 (L1) transactions. This way many L2 transactions get combined into a single L1 transaction. This lowers the average transaction cost per transaction, because many L2 transactions together fund the transaction cost for the single L1 transaction. This creates incentives to use base rather than the L1, i.e. Ethereum, itself.

To get crypto-assets in and out of base, a special smart contract on Ethereum is used. Since there is no consensus mechanism on L2 an additional mechanism ensures that only existing funds can be withdrawn from L2. When a user wants to withdraw funds, that user needs to submit a withdrawal request on L1. If this request remains unchallenged for a period of time the funds can be withdrawn. During this time period any other user can submit a fault proof, which will start a dispute resolution process. This process is designed with economic incentives for correct behaviour.

Binance Smart Chain (BSC) uses the Proof of Staked Authority (PoSA) consensus mechanism to ensure network security and incentivize participation from validators and delegators.

Incentive Mechanisms

1. Validators:
    - Staking Rewards: Validators must stake a significant amount of BNB to participate in the consensus process. They earn rewards in the form of transaction fees and block rewards.
    - Selection Process: Validators are selected based on the amount of BNB staked and the votes received from delegators. The more BNB staked and votes received, the higher the chances of being selected to validate transactions and produce new blocks.
2. Delegators:
    - Delegated Staking: Token holders can delegate their BNB to validators. This delegation increases the validator's total stake and improves their chances of being selected to produce blocks.
    - Shared Rewards: Delegators earn a portion of the rewards that validators receive. This incentivizes token holders to participate in the network's security and decentralization by choosing reliable validators.
3. Candidates:
    Pool of Potential Validators: Candidates are nodes that have staked the required amount of BNB and are waiting to become active validators. They ensure that there is always a sufficient pool of nodes ready to take on validation tasks, maintaining network resilience.

4. Economic Security:
- Slashing: Validators can be penalized for malicious behavior or failure to perform their duties. Penalties include slashing a portion of their staked tokens, ensuring that validators act in the best interest of the network.
- Opportunity Cost: Staking requires validators and delegators to lock up their BNB tokens, providing an economic incentive to act honestly to avoid losing their staked assets.

Fees on the Binance Smart Chain

1. Transaction Fees:
- Low Fees: BSC is known for its low transaction fees compared to other blockchain networks. These fees are paid in BNB and are essential for maintaining network operations and compensating validators.
- Dynamic Fee Structure: Transaction fees can vary based on network congestion and the complexity of the transactions. However, BSC ensures that fees remain significantly lower than those on the Ethereum mainnet.

2. Block Rewards:
Incentivizing Validators: Validators earn block rewards in addition to transaction fees. These rewards are distributed to validators for their role in maintaining the network and processing transactions.

3. Cross-Chain Fees:
Interoperability Costs: BSC supports cross-chain compatibility, allowing assets to be transferred between Binance Chain and Binance Smart Chain. These cross-chain operations incur minimal fees, facilitating seamless asset transfers and improving user experience.

4. Smart Contract Fees:
Deploying and interacting with smart contracts on BSC involves paying fees based on the computational resources required. These fees are also paid in BNB and are designed to be cost-effective, encouraging developers to build on the BSC platform.

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. Solana uses a combination of Proof of History (PoH) and Proof of Stake (PoS) to secure its network and validate transactions.

Incentive Mechanisms:

1. Validators:
   - Staking Rewards: Validators are chosen based on the number of SOL tokens they have staked. They earn rewards for producing and validating blocks, which are distributed in SOL. The more tokens staked, the higher the chances of being selected to validate transactions and produce new blocks.
   - Transaction Fees: Validators earn a portion of the transaction fees paid by users for the transactions they include in the blocks. This provides an additional financial incentive for validators to process transactions efficiently and maintain the network's integrity.

2. Delegators:
   - Delegated Staking: Token holders who do not wish to run a validator node can delegate their SOL tokens to a validator. In return, delegators share in the rewards earned by the validators. This encourages widespread participation in securing the network and ensures decentralization.

3. Economic Security:
   - Slashing: Validators can be penalized for malicious behavior, such as producing invalid blocks or being frequently offline. This penalty, known as slashing, involves the loss of a portion of their staked tokens. Slashing deters dishonest actions and ensures that validators act in the best interest of the network.
   - Opportunity Cost: By staking SOL tokens, validators and delegators lock up their tokens, which could otherwise be used or sold. This opportunity cost incentivizes participants to act honestly to earn rewards and avoid penalties. Fees Applicable on the Solana Blockchain.

Transaction Fees:

1. Low and Predictable Fees:
   Solana is designed to handle a high throughput of transactions, which helps keep fees low and predictable. The average transaction fee on Solana is significantly lower compared to other blockchains like Ethereum.
2. Fee Structure:

Fees are paid in SOL and are used to compensate validators for the resources they expend to process transactions. This includes computational power and network bandwidth.

3. Rent Fees:

State Storage: Solana charges rent fees for storing data on the blockchain. These fees are designed to discourage inefficient use of state storage and encourage developers to clean up unused state. Rent fees help maintain the efficiency and performance of the network.

4. Smart Contract Fees:

Execution Costs: Similar to transaction fees, fees for deploying and interacting with smart contracts on Solana are based on the computational resources required. This ensures that users are charged proportionally for the resources they consume.

S.6	Beginning of the period to which the disclosure relates	2024-05-28
S.7	End of the period to which the disclosure relates	2025-05-28
S.8	Energy consumption	117.49513 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(s) arbitrum, base, binance_smart_chain, ethereum, solana 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.