CRYPTO-ASSET WHITE PAPER CA - $SONIC TOKEN

Version Number	1.0
Document Type	White Paper
Document Author Offeror	Mirror World Foundation
Document Status	DRAFT
Language	English

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01 Date of Notification

The Date of Notification of this Crypto-Asset White Paper is 2025-10-16.

STATEMENTS

02 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 This Crypto-Asset White Paper complies with Title II of the Regulation (EU) 2923/1114, 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 The Crypto-Asset White Paper provides that the Crypto-Asset may not be transferable, or liquid, or lose its value, in part or in full.

05 The Utility Token referred to in this Crypto-Asset White Paper may not be exchangeable against the good or service promised in the Crypto-Asset White Paper, especially in the case of a failure or discontinuation of the Crypto-Asset Project.

06 The Crypto-Asset referred to in this Crypto-Asset White Paper is not covered by the investor compensation schemes under the Directive 97/9/EC of the European Parliament and of the Council.

The Crypto-Asset referred to in this Crypto-Asset White Paper is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

WARNING and SUMMARY

07 The summary should be read in conjunction with the content of 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 the Crypto-Asset does not constitute an offer or solicitation to purchase financial instruments and that any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable National Law.

This Crypto-Asset White Paper does not constitute a prospectus as referred to in the Regulation (EU) 2017/1129 of the European Parliament and the Council or any other offer document pursuant to the European Union or National Law.

08 Summary :

a. Brief Description

i. The SONIC token is the utility and governance token for the Sonic network, a high-speed blockchain designed for on-chain games. It is not a currency or a share in a company and does not generate profit or provide ownership.

b. Rights of the Purchaser

i. As a SONIC token holder, you have the right to:

1. **Participate in Governance:** You can convert your SONIC tokens into veSONIC to vote on proposals that shape the future of the network, such as software upgrades and fund allocation.
2. **Support the Network and Earn Rewards:** You can stake your tokens with network validators. By doing so, you help secure the network and may earn rewards from network fees.
3. **Capture Ecosystem Value:** Holding veSONIC may give you a share of fees generated by applications built on the Sonic network, such as decentralized exchanges or NFT marketplaces.

c. Obligations of the Purchaser

i. By purchasing and using SONIC tokens, you are obligated to:

1. **Follow Governance Rules:** If you participate in voting, you must follow the established rules, which include locking tokens to create proposals and accepting that your voting power decreases over time to ensure fairness.
2. **Understand the Risks:** You are responsible for understanding that the token's value can be volatile, and participating in staking or governance involves technical risks, including the potential loss of tokens due to slashing for validator misbehavior.
3. **Manage Your Own Assets:** You are solely responsible for securely storing your tokens and managing your digital wallet.

d. How to Exercise Your Rights

i. **To Vote:** You must connect your digital wallet to the official Sonic governance platform and convert SONIC to veSONIC. You can then cast votes on active proposals.

ii. **To Stake:** You must use the official staking interface to delegate your tokens to a validator of your choice. Rewards will be distributed automatically according to the protocol's rules.

e. Modification of Rights and Obligations

i. The rights and obligations attached to the SONIC token are not static. They may be modified only through the community governance process. This means that any proposed changes must be submitted as a proposal, discussed by the community, and approved by a vote of veSONIC holders. No single entity can unilaterally change the rules.

09 Quality and Quantity of Goods and Services

a. The $SONIC token is a utility token that provides access to and participation within the Sonic Network, a high-performance blockchain built on the HyperGrid framework. The quality and scope of these goods and services are intrinsically linked to the development, adoption, and operational success of the network. The key utilities are as follows:

i. **Governance Participation:** Holders can convert $SONIC tokens to $veSONIC on a 1:1 basis to participate in the decentralized governance of the Sonic Network. This grants the right to vote on proposals that shape the network's future, including software upgrades, treasury allocation, and parameter changes, as defined in the $SONIC Governance Framework.

ii. **Network Security and Staking Rewards:** Holders have the right to stake $SONIC tokens, or delegate them via $veSONIC, to validators that

secure the network. In return for supporting network operations, stakers and delegators may earn rewards from network fees, subject to the operational success of the validation pool, the staking programs activated per the project's roadmap, and the slashing risks for validator misbehavior as outlined in this White Paper.

iii. **Access to Ecosystem Value:** Holding $veSONIC is designed to provide holders with a means to capture value generated within the Sonic ecosystem. This may include a share of fees from embedded services such as decentralized exchanges (DEXs), NFT marketplaces, and launchpads, the quantity of which is directly dependent on the usage and success of these third-party applications.

iv. **Use of Network Services:** The $SONIC token is the native instrument for the Sonic Network, which provides a platform for developing and operating high-throughput, low-latency decentralized applications (dApps), particularly on-chain games. The quality of this service—including transaction speed, finality, and reliability—is a function of the underlying technology and its successful implementation.

b. **It is important to note that the provision and quality of these goods and services are not guaranteed.** They are contingent upon the successful development, maintenance, and adoption of the Sonic Network. The value of rewards and fees is variable and subject to market conditions and ecosystem activity.

Restrictions on Transferability

c. **Protocol-Level Restrictions:** The conversion of $SONIC to its governance-locked form, $veSONIC, involves a voluntary locking mechanism. Once converted, $veSONIC is non-transferable and is subject to a linear decay of voting power over time. The underlying $SONIC tokens remain locked and are not transferable until the holder converts them back from $veSONIC, a process subject to the decay mechanism defined in the $SONIC Governance Framework.

d. **Regulatory and Jurisdictional Restrictions:** The offer and subsequent transfer of $SONIC tokens may be restricted for residents of certain jurisdictions. Purchasers are obligated to ensure that their purchase and any transfer of $SONIC tokens comply with all applicable laws and regulations in their country of residence. The Offeror reserves the right to block transfers from or to wallets associated with restricted or sanctioned jurisdictions.

e. **Trading Platform Restrictions:** The ability to transfer $SONIC tokens may be subject to the terms of service, policies, and operational controls of any third-party Crypto-Asset Service Provider (CASP), such as centralized exchanges or decentralized trading platforms, through which the tokens are held or traded. The Offeror does not control these third-party platforms and is not responsible for transfer restrictions they may impose.

10 The primary trading platform for which admission is sought is OKX. This will provide liquidity and enable secondary market trading for token holders.

I. INFORMATION ON RISKS

I.1 **Offer-Related Risks**

Conflicts of interest: Decision-making within the $SONIC ecosystem may, at times, reflect the priorities of operational stakeholders (e.g., specialized committees or validator/operators) that do not align with the interests of all token holders. The $SONIC Governance Framework contemplates a Maintenance Committee and an Incentive Committee with defined remits, which could influence outcomes affecting holders.

Legal risks: Uncertainties in future proceedings could affect the legality, usability, or value of $SONIC.

Third-party risk: If $SONIC is offered, admitted to trading, or otherwise handled by third parties (e.g., exchanges, custodians, or other CASPs), there is exposure to those parties' performance and compliance (including risks of insolvency, fraud, or operational failures). The provided files do not name any trading venues or CASPs; therefore, any such arrangements—if pursued—would introduce the customary third-party risks.

Regulatory compliance risks: Any CASPs or venues that might handle $SONIC would be subject to diverse, evolving regulatory regimes. Non-compliance by such service providers could result in fines, sanctions, or service disruptions that may hinder market access or token utility. The attachments do not specify venues or compliance frameworks, so jurisdiction-specific impacts remain uncertain and should be assessed before any offering or admission to trading.

I.2 Issuer-Related Risks

Legal risks: The uploaded documents describe technology, governance, and a TGE reference but do not identify a legal issuer entity, governing law, or dispute forum. Legal uncertainties or proceedings could affect the legality, usability, or value of $SONIC.

Operational Risks: Execution of the $SONIC/HyperGrid roadmap depends on multiple moving parts (e.g., validator operations, staking rollout, bridge operations). Failures or delays in operational processes or infrastructure could disrupt token-related functionality and harm user confidence.

Conflicts of Interest: Governance contemplates specialized bodies (e.g., Maintenance

Committee, Incentive Committee). Their actions or priorities may, at times, diverge from the interests of all token holders and influence outcomes affecting holders.

Technology Management Risks: $SONIC depends on specific technical components (e.g., validator-verified state commitments to Solana, ZK proof batching, data-availability layers, and bridging). Poor change management, delayed upgrades, or unaddressed vulnerabilities could lead to security incidents or obsolescence.

Counterparty Risks: If third-party venues or service providers (e.g., exchanges, custodians) handle $SONIC in the future, their insolvency, fraud, or compliance failures could disrupt trading or custody. The attachments do not identify any venues/CASPs, so specific counterparties are unknown.

Reputational Risks: Security breaches, operational failures, or perceived misuse of governance could damage the project's reputation, reducing adoption or token value.

I.3 Crypto-Assets-Related Risks

Regulatory and Tax Risks: Changes in crypto-asset regulation (e.g., consumer protection, taxation, AML requirements) across jurisdictions could affect the legality, usability, or value of $SONIC and may influence any future admission-to-trading arrangements.

Liquidity Risk: If secondary-market liquidity is limited, buying or selling significant amounts of $SONIC could materially impact price. This risk is heightened in volatile market conditions.

Custodial Risk: Holding $SONIC (or $veSONIC) in exchanges or self-custody wallets entails risks of theft, key loss, or custodian failure; such incidents may lead to irreversible loss.

Market Risk: Crypto-asset prices can be highly volatile and influenced by sentiment, regulatory developments, technology changes, and macroeconomic factors, which may lead to rapid fluctuations in the market value of $SONIC.

Smart Contract Risk: $SONIC-related functionality (e.g., $veSONIC locking/claims and staking programs) depends on smart contracts that could contain vulnerabilities.

Counterparty Risk: If $SONIC is transacted through third parties (e.g., exchanges or custodians), those entities may fail to meet obligations due to insolvency, fraud, or compliance breaches, potentially causing losses.

Reputational Risk: Security incidents, operational disruptions, or negative publicity related to $SONIC/HyperGrid or associated smart contracts could reduce user confidence and negatively affect $SONIC's adoption and market value.

I.4 Project Implementation-Related Risks

Scalability challenges: HyperGrid targets horizontal scaling and suggests creating a new Grid when a dApp approaches around 100,000 TPS average or around 1,000,000 TPS peak. Achieving these throughput objectives in production depends on correct configuration, validator participation, and workload patterns; shortfalls could increase latency or constrain capacity.

Security Vulnerabilities: $SONIC-related functionality (e.g., $veSONIC locking/claims and staking programs) depends on smart contracts and complex protocol components (sequencing, proof batching, bridging, DA). Although external audits reported limited findings, audits cannot guarantee the absence of defects or exploits.

Interoperability Risks: Bridging between Solana L1 and Grids relies on validator-controlled program addresses and BLS multi-signature aggregation, with standard and emergency exit paths. Any disruption in validator signatures, state commitments, or bridge operations could delay withdrawals or asset movement.

Centralization Risk: Network operation concentrates critical functions in validators (sequencing, slot proposal, execution verification, posting state to Solana) and Shared Sequencers who receive a portion of sequence fees; governance also contemplates specialized committees (Maintenance, Incentive). Over-reliance on a limited set of operators or committee decisions could reduce effective decentralization.

Governance Issues: $SONIC's model requires converting $SONIC to $veSONIC (1:1) to vote, with a 14-day voting period, a 2-day voting delay, and a YES-only quorum; community powers include setting minimum quorum, voting period, voting delay, and proposal threshold. Disagreements on these parameters or on upgrade proposals could slow decision-making or delay implementation.

I.5 Technology-Related Risks

Cybersecurity risks: $SONIC/HyperGrid relies on validator-operated bridging, ZK proof submission, and DA services. Security incidents affecting validator keys, bridge programs, ZK-coprocessor integration, or DA nodes could disrupt operations or jeopardize assets and data integrity.

Risks related to private keys: Access to $SONIC (and to bridged assets on Grids) ultimately depends on secure key management by users and validators. Loss, compromise, or misuse of keys – particularly those used in BLS multi-signature aggregation for bridging – may cause

irreversible loss or delayed withdrawals.

Bridging and withdrawal pathway risks: SOL bridging uses validator-controlled program addresses and BLS signature aggregation; exits rely on validator attestations, with an emergency exit on Solana L1 if Grid state commitments lapse. Any failure or delay in signatures or state posting can affect asset movement and user experience.

Scalability and performance risks: HyperGrid targets very high throughput and recommends spin-up of a new Grid when a dApp approaches ~100,000 TPS average or ~1,000,000 TPS peak. These are architectural objectives; real-world performance depends on validator participation, workload patterns, DA responsiveness, and execution engines (SVM/Neon/Firedancer), and may not be consistently achieved.

Protocol Vulnerabilities: State transitions are verified via a Concurrent Merkle Tree and Proof-of-History–style hashing before posting roots to Solana. Bugs or edge cases in these components – or in the transaction lifecycle (sequencing, ZK proof batching, settlement) – could impact finality or correctness.

Data availability and shared-state risks: HyperGrid's DHTAccountsDB (Kademlia-based) serves as a decentralized DA layer for state/history retrieval. Failures, partitioning, or misconfiguration in DA nodes could impede verification, affect transparency of program state, or complicate recovery after incidents.

Governance/operational coupling risks: Validators sequence transactions and post state roots; committee-governed parameters or validator under-participation could create operational bottlenecks that manifest as technical degradation (e.g., slower settlement or delayed exits).

I.6 Mitigation Measures

Consensus Protocol: $SONIC/HyperGrid anchors verification to Solana L1 rather than operating a standalone consensus chain. Within each Grid, validators reconstruct Proof-of-History–style transition sequences and generate Concurrent Merkle Tree commitments before posting the state root to Solana Mainnet for finality. This BFT-oriented attestation, combined with L1 settlement, strengthens integrity and minimizes single-domain failure risks.

Network Security: The design incorporates a validator-run bridge on Solana using BLS multi-signature aggregation, plus two exit paths: a standard withdrawal and an emergency exit to L1 if Grid commitments lapse. A ZK-coprocessor batches proofs for L1 submission, and DHTAccountsDB (Kademlia-based) enhances data availability and recovery. Together, these measures harden settlement, asset continuity, and state verifiability.

Incentives, monitoring, and slashing: Validators stake to participate, act as shared sequencers, and receive a portion of sequence fees; Observation Nodes monitor L2 activity

and may trigger slashing upon malicious behavior—creating economic deterrence against faults or collusion.

Comprehensive Auditing: Independent audits have been conducted on core application-layer contracts.

Transparency of governance: The $SONIC Governance Framework specifies public proposal phases, fixed voting windows, a “YES-only” quorum, and a proposer lock, which together provide ex-ante procedural clarity for protocol changes and resource allocation.

GENERAL INFORMATION

A. Information of the Offeror or the Person Seeking Admission to Trading

A.1	*Name*	Mirror World Foundation
A.2	*Legal Form, if applicable*	Foundation Company
A.3	*Registered Address, if applicable*	PANAMA DISTRICT, PANAMA PROVINCE, JUAN DÍAZ, BOULEVARD COSTA DEL ESTE, PH FINANCIAL PARK TOWER, FLOOR 17
A.4	*Head Office, if applicable*	n/a
A.5	*Date of Registration [YYYY-MM-DD]*	2024-06-03
A.6	*Legal Entity Identifier (LEI)*	n/a
A.7	*Another identifier required pursuant to applicable national law*	25055989
A.8	*Contact Telephone Number*	+8*52 65877801*
A.9	*E-Mail Address*	liyutong@sonic.game
A.10	*Response Time (days)*	20 working days
A.11	*Parent Company, if applicable*	n/a

A.12	*Members of Management Body*	ZHU YUAN - CEO
A.13	*Business Activity*	Token Issuing, Blockchain Infrastructure
A.14	*Parent Company Business Activity, if applicable*	n/a
A.15	*Newly Established*	Yes
A.16	*Financial Condition for the past Three Years*	The issuer has maintained stable financial operations over the past three years
A.17	*Financial Condition since Registration*	The issuer has maintained stable financial operations since registration

B. Information of the Issuer

This section shall ONLY be completed if the information is different to that listed in section 1, above.

B.1	*Is the Issuer different from an offeror or person seeking admission to trading?*	No
B.2	*Name*	n/a
B.3	*Legal Form, if applicable*	n/a

B.4	*Registered Address, if applicable*	n/a
B.5	*Head Office, if applicable*	n/a
B.6	*Date of Registration [YYYY-MM-DD]*	n/a
B.7	*Legal Entity Identifier (LEI)*	n/a
B.8	*Another identifier required pursuant to applicable national law*	n/a
B.9	*Parent Company*	n/a
B.10	*Members of the Management Body*	n/a
B.11	*Business Activity*	n/a
B.12	*Parent Company Business Activity*	n/a

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

n/a

INFORMATION ABOUT THE CRYPTO-ASSET

D. Information about the Crypto-Asset Project

D.1	*Project Name*	$SONIC (a game-focused grid within the HyperGrid framework)
D.2	*Crypto-Assets Name*	$SONIC token (base token); $veSONIC (vote-escrowed form for governance)
D.3	*Abbreviation*	$SONIC; $veSONIC
D.4	*Crypto-Asset Project Description*	$SONIC is positioned as a strategic grid in HyperGrid to horizontally scale Solana for high-throughput, low-latency workloads (e.g., fully on-chain games), with developer tooling (APIs, templates, debuggers) and SVM/EVM program support. The architecture uses validators for transaction sequencing, slot proposal, execution verification, and state commitment to Solana L1, with DA via DHTAccountsDB.
D.5	*Details of all natural or legal persons involved in the implementation of the Crypto-Asset Project*	Mirror World Foundation oversees $SONIC issuance, Sonic ecosystem development and governance. ZHU YUAN and his team drive technological development, strategic partnerships and funding efforts to implement Sonic infrastructure. Validators handle transaction sequencing, slot proposal, execution verification and the posting of verified state commitments to Solana mainnet. HyperFuse Guardian Node operators act as safeguards for the HyperGrid Network and can earn $veSONIC for running or delegating nodes that maintain the network. Community governance participants convert $SONIC to $veSONIC on a 1:1 basis to vote on proposals, and proposers are required to lock $veSONIC to initiate a formal vote.
D.6	*Utility Token Classification*	Yes

D.7	*Key Features of Goods/Services for Utility Token Projects, if applicable*	$SONIC's described functionality is to provide access and participation rights within the $SONIC/HyperGrid network rather than to serve as a store-of-value instrument. $SONIC is positioned as a game-focused grid that horizontally scales Solana for high-throughput, low-latency workloads, with developer tooling that mirrors the Solana Mainnet experience and supports real-time, fully on-chain games. $SONIC (and its vote-escrowed form, $veSONIC) enable users to engage with this infrastructure and its governance processes. Staking: Holders may participate in the validator network via staking/delegation and share in validator rewards, with validators responsible for transaction sequencing, execution verification, and posting verified state commitments to Solana L1; the roadmap includes deployment of $SONIC staking with rewards and slashing mechanisms. Governance: $SONIC can be converted to $veSONIC on a 1:1 basis to vote on proposals under the $SONIC Governance Framework (including a defined voting period, delay, quorum model, and proposer lock). Data availability and security features: The network design references decentralized data availability (DHTAccountsDB) and validator-verified state commitments to the Solana mainnet as part of its resilience and verification model for on-chain activity.
D.8	*Plans for the Token*	$SONIC is positioned as the native instrument for coordinating $SONIC's game-centric HyperGrid network, with two principal roles: governance via 1:1 conversion to $veSONIC and network participation through staking and delegation with validators. The Technical Detailed Roadmap schedules the $SONIC Token Generation Event in Phase 1 (Q4 2024-Q1 2025), followed by $SONIC Mainnet-Alpha and core service deployments in Phase 2, and the rollout of $SONIC staking with rewards and slashing – together with delegation to HyperGrid validators – in Phase 3. Governance parameters are defined in the $SONIC Governance Framework, including a 14-day voting period, a 2-day voting delay, a quorum model counting only "YES" votes, and a proposer lock of 120,000 $veSONIC; voting power decays halfway through each proposal window and linearly over time overall. Longer-term technical work includes research and development toward zkSVM for HyperGrid nodes in Phase 4.

D.9	*Resource Allocation, if applicable*	n/a
D.10	*Planned Use of Collected Funds or Crypto-Assets, if applicable*	The funds are intended to further develop Sonic infrastructure and products, expand operations, support ecosystem growth, community incentives and marketing and partnerships.

E. Information about the Offer to the Public of the Crypto-Asset or Its Admission to Trading

E.1	*Public Offering or Admission to Trading*	ATTR
E.2	*Reasons for Public Offer or Admission to Trade*	In order to enable the further technological development in the $SONIC ecosystem and network enhancement, the funds collected through the sale of $SONIC are allocated to that goal.
E.3	*Fundraising Target, if applicable*	n/a
E.4	*Minimum Subscription Goals, if applicable*	n/a
E.5	*Maximum Subscription Goals, if applicable*	n/a
E.6	*Oversubscription Acceptance*	n/a
E.7	*Oversubscription Allocation, if applicable*	n/a
E.8	*Issue Price*	n/a

E.9	*Official Currency or Any 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, if applicable*	n/a
E.13	*Targeted Holders*	All types of investors
E.14	*Holder Restrictions*	Non eligible persons and residents of restricted states
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 [YYYY-MM-DD]*	n/a

E.22	*Subscription Period, end* *[YYYY-MM-DD]*	n/a
E.23	*Safeguarding Arrangement 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, if applicable*	n/a
E.27	*Transfer of Purchased Crypto-Assets*	n/a
E.28	*Transfer Time Schedule [YYYY-MM-DD]*	n/a
E.29	*Purchaser's Technical Requirements*	To hold $SONIC, purchaser needs to directly manage a $SONIC compatible wallet and its private keys or have a third party manage such a wallet and keys. $SONIC wallets may be cold wallets, disconnected from the internet or hot wallets, connected to the internet.
E.30	*Crypto-Asset Service Provider (CASP) name, if applicable*	n/a
E.31	*CASP identifier, if applicable*	n/a
E.32	*Placement Form*	n/a

E.33	*Trading Platforms Name, if applicable*	$SONIC will be listed on the following trading platform: OKX
E.34	*Trading Platforms Market Identifier Code (MIC)*	n/a
E.35	*Trading Platforms Access, if applicable*	Investors can access the trading platform through its website.
E.36	*Involved Costs, if applicable*	n/a
E.37	*Offer Expenses*	n/a
E.38	*Conflicts of Interest*	n/a
E.39	*Applicable Law*	n/a
E.40	*Competent Court*	n/a

F. Information about the Crypto-Assets

F.1	*Crypto-Asset Type*	Under the MiCAR, $SONIC is a crypto-asset of the “other” type.
F.2	*Crypto-Asset Functionality*	$SONIC enables the following functionalities: 1. Decentralized Governance • Holders convert $SONIC to $veSONIC on a 1:1 basis to participate in governance voting. Voting power on a proposal decays after the midpoint of the voting window, and overall voting power also decays linearly over time. The standard voting period is 14 days with a 2-day voting delay before results are finalized; quorum counts “YES” votes only, with 30,000,000 $veSONIC required to pass, and a proposer must lock 120,000 $veSONIC to

		initiate a formal proposal. 2. Staking for Network Security: • Holders stake $SONIC (and may delegate via $veSONIC) to HSSN validators to help secure the $SONIC/HyperGrid network. Validators carry out transaction sequencing, slot proposal, execution verification, and state commitment to Solana L1, and they act as Shared Sequencers that receive a portion of sequence fees. Stakers/delegators earn validator rewards tied to these network activities. The staking design includes slashing for validator misbehavior; Observation Nodes monitor L2 activity and can trigger slashing when malicious behavior is detected. 3. Sequencing and Validator Incentives: • Within HyperGrid, validators also serve as Shared Sequencers and receive a portion of sequence fees; users who delegate via $veSONIC share validator rewards. 4. Ecosystem Value Capture via $veSONIC: • Holding $veSONIC captures $SONIC ecosystem value, including embedded swap fees, NFT marketplace fees, and launchpad revenue shares; future HyperGrid games may allocate rewards to $veSONIC holders, reinforcing participation incentives.
F.3	*Planned Application of Functionalities*	$SONIC Token Generation Event is scheduled in Phase 1 (Q4 2024-Q1 2025), $SONIC Mainnet-Alpha is targeted for Phase 2 (Q1 2025), and $SONIC staking with delegation to HSSN validators (including rewards and slashing) is planned for Phase 3 (Q2 2025). Governance via 1:1 conversion to $veSONIC applies throughout.
F.4	*Type of White Paper*	*OTHR*
F.5	*Type of Submission*	NEWT
F.6	*Crypto-Asset Characteristics*	Native utility and governance token of the Sonic Network

F.7	*Commercial Name or Trading Name, if applicable*	$SONIC
F.8	*Website of the Issuer*	https://sonicsvm.org/
F.9	*Starting Date of Admission to Trading [YYYY-MM-DD]*	2025/10/24
F.10	*Publication Date [YYYY-MM-DD]*	2025/10/24
F.11	*Any Other Services Provided by the Issuer*	n/a
F.12	*Language/s of the White Paper*	English
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*	$SONIC; $veSONIC
F.14	*Functionally Fungible Group Digital Token Identifier, where available*	n/a
F.15	*Voluntary Data Flag*	False - Mandatory
F.16	*Personal Data Flag*	Yes
F.17	*LEI Eligibility*	True - Eligible

F.18	*Home Member State*	Ireland
F.19	*Host Member States*	Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania Slovakia, Slovenia, Spain, Sweden, Iceland, Liechtenstein, and Norway

G. Information about the Rights and Obligations Attached to the Crypto-Asset

G.1	*Purchaser Rights and Obligations*	Rights of $SONIC Purchasers • Utility within the Ecosystem: $SONIC enables participation in the $SONIC/HyperGrid network. Holders may convert $SONIC to $veSONIC on a 1:1 basis to engage in governance, and – once staking is live per the roadmap – participate in validator delegation within the HSSN to support network operations. • Governance Participation: Holders use $veSONIC to vote under the $SONIC Governance Framework. The model specifies a 14-day voting period, a 2-day voting delay, a “YES-only” quorum, and a proposer-lock requirement; voting power decays after the midpoint of each proposal window and also decays linearly over time. • Potential Rewards: By staking or delegating (when activated), holders may share validator rewards. In addition, holding $veSONIC captures ecosystem value including embedded swap fees, NFT-marketplace fees, and launchpad revenue shares; future HyperGrid games may allocate rewards to $veSONIC holders. • Security and Integrity of Operations: Transactions and state changes within

		$SONIC/HyperGrid are verified by validators with state roots committed to Solana mainnet; the design references ZK proofs and decentralized data availability (DHTAccountsDB) for resilience and verifiability. Obligations of $SONIC Purchasers • Compliance with Governance Rules: Purchasers who participate in governance must follow the $SONIC Governance Framework, including converting $SONIC to $veSONIC on a 1:1 basis for voting, observing the 14-day voting period and 2-day voting delay, and respecting the "YES-only" quorum model; proposers are required to lock 120,000 $veSONIC to initiate a formal proposal. • Network Participation Rules: When participating in network operations, purchasers acting as validators must stake 100 SOL, perform transaction sequencing, slot proposal, execution verification, and post state commitments; validators are subject to slashing for misbehavior. Observation-node operators monitor L2 activity and may trigger slashing upon detecting malicious behavior. Delegation (once staking is activated) is subject to the network's rewards and slashing mechanics. • Staking/Delegation Conditions: Upon activation per the roadmap, staking of $SONIC and delegation to HSSN validators will determine eligibility for validator reward sharing and exposure to the network's slashing framework; participants should operate within the parameters set by $SONIC's staking design.
G.2	*Exercise of Rights and Obligations*	**Exercising of rights:** Utilizing Ecosystem Services: • Holders may use $SONIC/HyperGrid's game-centric infrastructure and related services as they come

		online. The roadmap targets $SONIC Mainnet-Alpha with core services including the Bridge, DEX, Oracles, and NFT programs, as well as onboarding of HSSN validators. Participating in Governance: • Holders can convert $SONIC to $veSONIC on a 1:1 basis to vote on proposals under the $SONIC Governance Framework. Governance parameters include a 14-day voting period, a 2-day voting delay, a "YES-only" quorum, proposal-level voting-power decay after the midpoint of the window, and an overall linear decay; proposers are required to lock 120,000 $veSONIC to initiate a formal proposal. Earning Rewards: • When staking is activated, holders may stake or delegate to HSSN validators and earn validator rewards, with rewards and slashing mechanisms defined by the staking programs. The audited staking suite includes wallet staking and airdrop staking flows, pool supply top-ups and withdrawals, and post-period reward withdrawal processes. Security and Integrity of Operations: • Network operations are secured by validators that process transactions, verify execution, and post state commitments; for bridging, validators aggregate BLS signatures, and users have both a standard withdrawal and an emergency exit path to Solana L1, providing continuity of access to assets. **Obligations as a $SONIC Purchaser** Complying with Governance Rules: • Purchasers who participate in governance must follow the $SONIC Governance Framework, including converting $SONIC to $veSONIC for voting, observing the 14-day voting period and 2-day voting delay, and meeting the proposer-lock and quorum requirements where applicable. Following Network Participation Rules: • Validators must stake 100 SOL to operate and are responsible for sequencing, slot proposal, execution verification, and posting state commitments; they are subject to slashing. Observation-node operators monitor L2 activity and may trigger slashing upon detecting malicious behavior. Staking/Delegation Conditions:

		• Staking with HSSN validators, delegation, reward accrual, and slashing apply as specified by the staking programs once deployed; audited components describe wallet and airdrop staking processes, pool supply management, and reward withdrawals. Unspecified Purchaser Obligations: • The provided documents do not specify exchange terms, AML/KYC procedures, tax responsibilities, wallet/key-management requirements, or trading venue rules for $SONIC.
G.3	*Conditions for Modifications of Rights and Obligations*	n/a
G.4	*Future Public Offers, if applicable*	n/a
G.5	*Issuer Retained Crypto-Assets, if applicable*	360,000,000 $SONIC
G.6	*Utility Token Classification*	Yes
G.7	*Key Features of Goods/Services of Utility Tokens*	$SONIC powers a game-centric, horizontally scaling execution network ($SONIC on HyperGrid) anchored to Solana, enabling high-throughput, low-latency on-chain applications. Key features include decentralized governance via 1:1 conversion of $SONIC to $veSONIC with defined voting periods, delays, quorum and proposer-lock parameters for protocol upgrades and incentive allocation; staking and delegation to HSSN validators who handle sequencing, execution verification and state commitments with slashing and observation-node monitoring; and developer-facing infrastructure such as the Bridge, DEX, Oracles and NFT programs targeted around Mainnet-Alpha. The architecture supports secure interoperability through a validator-run bridge with aggregated BLS signatures and provides resilience via ZK proofs and decentralized data availability (DHTAccountsDB). Holding $veSONIC also captures ecosystem value from embedded swap fees, NFT-marketplace fees and launchpad revenue shares, aligning user participation with network growth.

G.8	*Utility Tokens Redemption, if applicable*	$SONIC are used for redeeming services in the Sonic Network ecosystem, users primarily use them for governance participation, staking and delegation, access to ecosystem value, and using network services.
G.9	*Non-Trading Request*	True - Sought
G.10	*Crypto-Assets Purchase or Sale Modalities*	n/a
G.11	*Crypto-Assets Transfer Restrictions*	n/a
G.12	*Supply Adjustment Protocols*	No
G.13	*Supply Adjustments Mechanisms*	n/a
G.14	*Token Value Protection Schemes*	No
G.15	*Token Value Protection Schemes Description*	n/a
G.16	*Compensation Schemes*	No
G.17	*Compensation Schemes Description, if applicable*	n/a
G.18	*Applicable Law*	Ireland
G.19	*Competent Court*	Courts of Ireland

H. Information about the Underlying Technology

H.1	*Distributed Ledger Technology, if applicable*	The DLT underlying $SONIC operates on HyperGrid, a rollups-style horizontal scaling architecture anchored to Solana L1. Each Grid executes transactions independently, verifies state transitions, and then posts compressed state roots to Solana for universal verification and finality. This design combines a Concurrent Merkle Tree for state commitments with Proof of History–based transition verification, enabling trustless validation and supporting instantaneous exits to Mainnet when needed. Key Features of HyperGrid's DLT 1. State commitment and verification – HyperGrid orchestrates state transitions through a Concurrent Merkle Tree, while validators reconstruct PoH-anchored transition hashes from state(N) to state(N+1) to verify correctness before committing the state root on Solana Mainnet. 2. ZK-Coprocessor and settlement – Within each Grid, the $SONIC ZK-Coprocessor batches proofs of executed transactions and submits them to Solana L1 for settlement, while transaction logs are written to Celestia to ensure data availability. 3. Bridging and safety – Bridging from Solana to Grids uses validator-controlled program addresses on L1 with BLS multi-signature aggregation. Users have two exit paths: a standard withdrawal processed by validator signatures and an emergency exit on L1 if Grid state commitments lapse, ensuring continuous access to assets. 4. Data availability (DA) – HyperGrid implements DHTAccountsDB, a Kademlia-based decentralized data-availability layer that stores transaction states and supports validator and user verification even in adverse conditions, reinforcing platform reliability. 5. Execution environments and performance – $SONIC supports SVM and EVM (via Neon EVM) program execution with parallelism, and references the Firedancer engine for high-throughput processing—providing a deployment experience equivalent to Solana Mainnet but with reduced fees on Grids. 6. Validator lifecycle and exits – Validators handle transaction sequencing through to posting the state root to Mainnet, providing the cryptographic basis for trustless verification and the instantaneous exit capability if Grid

		services are disrupted.
H.2	*Protocols and Technical Standards*	$SONIC/HyperGrid is built on a set of scaling, verification, and interoperability protocols anchored to Solana L1. The stack combines cryptographic commitment structures, PoH-style verification, decentralized data availability, and a validator-run bridging scheme, while supporting both SVM and EVM (via Neon) execution with references to the Firedancer engine for high-throughput processing. • State commitment and verification: Uses a Concurrent Merkle Tree for state commitments and Proof-of-History–style hashing to verify transitions from state N to N+1 before committing the state root to Solana mainnet. • Smart-contract execution environments: Supports SVM programs and EVM compatibility via Neon EVM; documentation also references the Firedancer execution engine to enable parallel, high-throughput processing. • Interoperability and bridging: Employs validator-controlled program addresses on Solana L1 with BLS multi-signature aggregation for secure bridging, alongside standard withdrawals and an emergency exit path if Grid state commitments lapse. • Data availability layer: Implements DHTAccountsDB, a Kademlia-based decentralized DHT that preserves transaction/state data for verification and recovery across Grids. • Governance protocol: Token-based governance via 1:1 conversion of $SONIC to $veSONIC, with a 14-day voting period, 2-day voting delay, YES-only quorum, and a 120,000 $veSONIC proposer lock; proposal-level voting power decays after the midpoint and overall voting power decays linearly. • Settlement and proof batching: Each Grid integrates a ZK-Coprocessor to batch proofs of executed transactions and submit them to Solana L1 for settlement; transaction logs are written to Celestia for data availability.
H.3	*Technology Used, if relevant*	$SONIC deploys a ZK-Coprocessor per Grid to batch proofs and submit them to Solana, while transaction logs are written to Celestia for data availability. Execution can target SVM or EVM (via Neon), with

		Firedancer referenced for high-throughput processing.
H.4	*Consensus Mechanism, if applicable*	HyperGrid's consensus anchoring follows Solana-aligned verification rather than a standalone PoW/PoS chain. Within each Grid, executed transactions are ordered and transformed into a Proof-of-History–style sequence of events from state N to state N+1; validators reconstruct and hash these sequences, generate a Concurrent Merkle Tree commitment, and then submit the state root to Solana L1 for finality. This process is BFT-oriented: multiple validators attest to the correctness of the transition before commitment. A ZK-coprocessor batches proofs of executed transactions for L1 submission, while data-availability is maintained via the project's decentralized DA design. Together, PoH-based transition verification, Merkle commitments, validator attestations, and L1 settlement provide the basis for consensus and trustless verification across Grids.
H.5	*Incentive Mechanisms and Applicable Fees*	Validators stake to participate, act as shared sequencers, and receive a portion of sequence fees. Users may delegate $veSONIC to validators to share validator rewards. Observation Nodes that monitor L2s can trigger slashing and are rewarded in $SONIC.
H.6	*Use of Distributed Ledger Technology*	Yes, DLT operated by the Issuer or a Third-Party acting on the Issuer's behalf.
H.7	*DLT Functionality Description*	HyperGrid's distributed ledger functionality for $SONIC centers on Solana-anchored rollup "Grids" that execute transactions independently and commit compressed state roots to Solana L1 for finality. Core components include: $SONIC Grids: Execution domains where transactions are ordered and verified; validators reconstruct Proof-of-History–style transition hashes from state N to N+1 and generate Concurrent Merkle Tree commitments before posting state roots to Solana Mainnet for universal verification. ZK-Coprocessor and Settlement: Each Grid integrates a ZK-coprocessor that batches proofs of executed transactions and submits them to Solana L1; transaction logs are written to Celestia for data availability, supporting verifiability and recovery. Interoperability (Bridge): Bridging between Solana and Grids is operated via validator-controlled program

		addresses with BLS multi-signature aggregation; users have both a standard withdrawal path and an emergency L1 exit if Grid commitments lapse, ensuring continuity of access to assets. Data Availability: A Kademlia-based distributed hash table (DHTAccountsDB) preserves state/data so that validators and users can verify history even in adverse conditions, reinforcing network resilience. Execution Environments: $SONIC supports SVM programs and EVM compatibility via Neon EVM with parallel execution, and references the Firedancer engine for high-throughput processing; developers deploy with a Solana-like experience and reduced fees at the Grid level. Incentives and Roles: Validators also act as shared sequencers and receive a portion of sequence fees; observation nodes monitor L2 activity and can trigger slashing upon detecting malicious behavior, while delegators share validator rewards per the staking design.
H.8	*Audit of the Technology Used*	Yes
H.9	*Audit Outcome, if applicable*	$SONIC Staking Smart Contracts (Beosin) — Audit No. 202501061600 (Jan 6, 2025). $veSONIC Smart Contracts (Beosin) — Audit No. 202412091020 (Dec 9, 2024). Audit – $SONIC Staking Smart Contracts (Beosin): 1 Low (Fixed) relating to the withdraw function's authority, and 1 Informational (Acknowledged) concerning reward transfer on pool initialization. Audit – $veSONIC Smart Contracts (Beosin): 1 Medium (Fixed), 1 Low (Acknowledged), 2 Informational (Acknowledged). The report describes $veSONIC as a token lock-up/vesting mechanism with gradual claims and an updated two-step claim flow introduced on Dec 9, 2024 (submit claim request, then execute claim once all portions mature).

J. Information on the Principal Adverse Impacts on the Climate and Other Environmental-Related Adverse Impacts of the Consensus Mechanism Used to Issue the Crypto-Asset.

J.1	*Adverse Impacts on Climate and Other Environment-Related Adverse Impacts*	The issuer of $SONIC is providing information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to validate transactions in $SONIC and to maintain the integrity of the distributed ledger of transactions. More details on the sources and methodology used in relation to the information on energy consumption can be found on the issuer's website at https://sonicsvm.org/. Please refer to Section 5 for the features of the consensus mechanisms relevant for principal adverse impacts on the climate and other environment-related adverse impacts. Unlike Proof-of-Work cryptocurrencies like Bitcoin, which consume significant energy (e.g., 36 billion kWh annually for Bitcoin, equivalent to entire countries), the Sonic Network's consensus is optimized for efficiency.

GLOSSARY

Consensus Mechanism	Shall mean the rules and procedures by which an agreement is reached, among the DLT network nodes, that a transaction is validated.
Crypto-Asset	Shall mean a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology.
Distributed Ledger Technology or DLT	shall mean the technology that enables the operation and use of distributed ledgers.
Home Member State	Shall mean either (a) where the offeror or person seeking admission to trading of crypto-assets other than asset-referenced tokens or e-money tokens has its registered office in the Union, the Member State where that offeror or person has its registered office; or (b) where the offeror or person seeking admission to trading of crypto-assets other than asset-referenced tokens or e-money tokens has no registered office in the Union but does have one or more branches in the Union, the Member State chosen by that offeror or person from among the Member States where it has branches; or (c) where the offeror or person seeking admission to trading of crypto-assets other than asset-referenced tokens or e-money tokens is established in a third country and has no branch in the Union, either the Member State where the crypto-assets are intended to be offered to the public for the first time or, at the choice of the offeror or person seeking admission to trading, the Member State where the first application for admission to trading of those crypto-assets is made; or (d) in the case of an issuer of asset-referenced tokens, the Member State where the issuer of asset-referenced tokens has its registered office; or (e) in the case of an issuer of e-money tokens, the Member State where the issuer of e-money tokens is authorised as a credit institution under Directive 2013/36/EU or as an electronic money institution under Directive 2009/110/EC; or (f) in the case of crypto-asset service providers, the Member State where the crypto-asset service provider has its registered office.
Host Member State	Shall mean the Member State where an Offeror or Person Seeking Admission to Trading has made an offer to the Public of Crypto-Assets or is seeking admission to trading, or where a Crypto-Asset Service Provider provides crypto-asset services, where different from the Home Member State.

Issuer	Shall mean a natural or legal person, or other undertaking, who issues crypto-assets.
Management Body	Shall mean the body or bodies of an Issuer, Offeror, Person Seeking Admission to Trading, or of a Crypto-Asset Service Provider, which are appointed in accordance with National Law, which are empowered to set the entity's strategy, objectives and overall direction, and which oversee and monitor management decision-making in the entity and include the persons who effectively direct the business of the entity.
Offer to the Public	Shall mean a communication to persons in any form, and by any means, presenting sufficient information on the terms of the offer and the crypto-assets to be offered so as to enable prospective holders to decide whether to purchase those crypto-assets.
Offeror	Shall mean a natural or legal person, or other undertaking, or the issuer, who offers crypto-assets to the public.
Operator	Shall mean the entity that runs a trading platform for crypto-assets.
Qualified Investors	Shall mean persons or entities that are listed in Section I, points (1) to (4), of Annex II to Directive 2014/65/EU.
Retail Investor/Holder	Shall means any natural person who is acting for purposes which are outside that person's trade, business, craft or profession.
Utility Token	Shall mean a type of crypto-asset that is only intended to provide access to a good or a service supplied by its Issuer.