

MiCA White Paper

MOVE (MOVE)

Version 1.0
August 2025

White Paper in accordance with Markets in Crypto Assets Regulation (MiCAR)
for the European Economic Area (EEA).

Purpose: seeking admission to trading in EEA.

Prepared and Filed by LCX.com

NOTE: THIS CRYPTO-ASSET WHITE PAPER HAS NOT BEEN APPROVED BY ANY COMPETENT AUTHORITY IN ANY MEMBER STATE OF THE EUROPEAN ECONOMIC AREA. THE PERSON SEEKING ADMISSION TO TRADING IS SOLELY RESPONSIBLE FOR THE CONTENT OF THIS CRYPTO-ASSET WHITE PAPER ACCORDING TO THE EUROPEAN ECONOMIC AREA'S MARKETS IN CRYPTO-ASSET REGULATION (MICA).

LCX is voluntarily filing a MiCA-compliant whitepaper for MOVE (MOVE), even though MOVE is classified as "Other Crypto-Assets" under the Markets in Crypto-Assets Regulation (MiCA). Unlike Asset-Referenced Tokens (ARTs), Electronic Money Tokens (EMTs), or Utility Tokens, MOVE does not legally require a MiCA whitepaper. However, MiCA allows service providers to publish a whitepaper voluntarily to enhance transparency, regulatory clarity, and investor confidence. MOVE is the token of the Movement Network, a new high-performance Layer-2 blockchain ecosystem built on Ethereum, which introduces the safety of the Move programming language to Ethereum's scalability. This document provides comprehensive disclosures on MOVE's features, issuance, technology, risks, and sustainability impact, in alignment with MiCA requirements. By publishing this white paper, LCX aims to support a compliant and transparent market environment for MOVE in the EU, setting high disclosure standards and fostering trust among investors.

This document provides essential information about MOVE's characteristics, risks, and the framework under which LCX facilitates MOVE-related services in compliance with MiCA's regulatory standards.

This white paper has been prepared in accordance with the requirements set forth in Commission Implementing Regulation (EU) 2024/2984, ensuring that all relevant reporting formats, content specifications, and machine-readable structures outlined in Annex I of this regulation have been fully mapped and implemented, particularly reflected through the Recitals, to enable proper notification under the Markets in Crypto-Assets Regulation (MiCAR).

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01 DATE OF NOTIFICATION

2025-09-01

COMPLIANCE STATEMENTS

- 02 This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Economic Area. The offeror of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

Where relevant in accordance with Article 6(3), second subparagraph of Regulation (EU) 2023/1114, reference shall be made to 'person seeking admission to trading' or to 'operator of the trading platform' instead of 'offeror'.

- 03 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 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 Not Applicable
- 06 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

This summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase this crypto-asset on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of this crypto-asset does not constitute an offer or solicitation to purchase financial instruments and any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law.

This crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council (36) or any other offer document pursuant to Union or national law.

08 Characteristics of the crypto-asset

The MOVE token is a blockchain-based digital asset designed to serve as a core component within the MOVE platform ecosystem. It is a fungible, cryptographically secured token recorded on a distributed ledger technology (DLT) infrastructure, enabling transparent and verifiable transactions. MOVE tokens facilitate various on-platform functionalities such as incentivizing user participation, enabling access to certain digital services, and potentially interacting with third-party applications or DeFi mechanisms. The token is transferable, divisible, and may be acquired or exchanged on both primary and secondary markets, depending on market availability and applicable jurisdictional limitations. MOVE does not represent a legal claim against the issuer, nor is it backed by any underlying reserve asset or fiat currency. The token's value may fluctuate based on supply-demand dynamics and user adoption, and it may be subject to market speculation. While the MOVE token may enable access to specific features within the ecosystem, its broader functionality and tradability go beyond the scope of a limited-use access right. Users should assess the risks associated with price volatility, regulatory treatment, and technology-related factors when acquiring or using MOVE tokens.

09 Not applicable

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

There is no new public offering of MOVE tokens – the token is already created and distributed. Instead, this document is prepared in the context of admission to trading of MOVE on a regulated crypto-asset trading platform (LCX). LCX AG, as a Liechtenstein-based regulated exchange operator, is facilitating the listing and trading of MOVE in compliance with MiCA. LCX is not the issuer of MOVE and does not control its supply; LCX's role is limited to providing a trading venue and custody services for the token in a compliant manner. This white paper is being published voluntarily to provide transparency and standardized information to investors regarding MOVE's characteristics, given its listing on the LCX exchange. Since MOVE is already in circulation and traded (including on decentralized exchanges following its creation), this admission does not involve any new token sale or fundraising. The trading of MOVE on LCX will occur under market conditions – prices determined by supply and demand in the market. LCX supports trading pairs for MOVE (e.g., MOVE/EUR) to provide liquidity for participants. By issuing this MiCA-compliant white paper and notifying the Liechtenstein Financial Market Authority (FMA), LCX ensures that trading of MOVE on its platform adheres to the new regulatory standards for investor protection and disclosure.

<i>Total offer amount</i>	Not applicable
<i>Total number of tokens to be offered to the public</i>	Not applicable
<i>Subscription period</i>	Not applicable
<i>Minimum and maximum subscription amount</i>	Not applicable
<i>Issue price</i>	Not applicable
<i>Subscription fees (if any)</i>	Not applicable
<i>Target holders of tokens</i>	Not applicable
<i>Description of offer phases</i>	Not applicable
<i>CASP responsible for placing the token (if any)</i>	Not applicable
<i>Form of placement</i>	Not applicable
<i>Admission to trading</i>	LCX AG, Herrengasse 6, 9490 Vaduz, Liechtenstein

A. PART A - INFORMATION ABOUT THE OFFEROR OR THE PERSON SEEKING ADMISSION TO TRADING

A.1 Name

LCX

A.2 Legal Form

AG

A.3 Registered Address

Herrengasse 6, 9490 Vaduz, Liechtenstein

A.4 Head Office

Herrengasse 6, 9490 Vaduz, Liechtenstein

A.5 Registration Date

24.04.2018

A.6 Legal Entity Identifier

529900SN07Z6RTX8R418

A.7 Another Identifier Required Pursuant to Applicable National Law

FL-0002.580.678-2

A.8 Contact Telephone Number

+423 235 40 15

A.9 E-mail Address

legal@lcx.com

A.10 Response Time (Days)

020

A.11 Parent Company

Not applicable

A.12 Members of the Management Body

Full Name	Business Address	Function
Monty C. M. Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	President of the Board
Katarina Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	Board Member
Anurag Verma	Herrengasse 6, 9490 Vaduz, Liechtenstein	Director of Technology

A.13 Business Activity

LCX provides various crypto-asset services under Liechtenstein's Token and Trusted Technology Service Provider Act ("Token- und Vertrauenswürdiges Technologie-Dienstleister-Gesetz" in short "TVTG") also known as the Blockchain Act. These include custody and administration of crypto-assets, offering secure storage for clients' assets and private keys. LCX operates a trading platform, facilitating the matching of buy and sell orders for crypto-assets. It enables both crypto-to-fiat and crypto-to-crypto exchanges, ensuring compliance with AML and KYC regulations. LCX also supports token placements, marketing crypto-assets on behalf of offerors.

Under MiCA, LCX is classified as a Crypto-Asset Service Provider (CASP). LCX is not yet formally supervised under MiCA until the license is granted by the competent authority. LCX AG has applied for MiCA licensing on February 1, 2025, the first day of MiCA's implementation in Liechtenstein.

Under the TVTG framework, LCX provides:

- TT Depositary – Custody and safekeeping of crypto-assets.
- TT Trading Platform Operator – Operation of a regulated crypto-asset exchange.
- TT Exchange Service Provider – Crypto-to-fiat and crypto-to-crypto exchange.
- Token Issuer – Marketing and distribution of tokens.
- TT Transfer Service Provider – Crypto-asset transfers between ledger addresses.
- Token Generator & Tokenization Service Provider – Creation and issuance of tokens.
- Physical Validator – Enforcement of token-based rights on TT systems.
- TT Verification & Identity Service Provider – Legal capacity verification and identity registration.
- TT Price Service Provider – Providing aggregated crypto-asset price information.

A.14 Parent Company Business Activity

Not applicable

A.15 Newly Established

false

A.16 Financial Condition for the past three Years

LCX AG has a strong capital base, with CHF 1 million (approx. 1,126,000 USD) in share capital (Stammkapital) and a solid equity position (Eigenkapital) in 2023. The company has experienced fluctuations in financial performance over the past three years, reflecting the dynamic nature of the crypto market. While LCX AG recorded a loss in 2022, primarily due to a market downturn and a security breach, it successfully covered the impact through reserves. The company has remained financially stable, achieving revenues and profits in 2021, 2023 and 2024 while maintaining break-even operations.

In 2023 and 2024, LCX AG strengthened its operational efficiency, expanded its business activities, and upheld a stable financial position. Looking ahead to 2025, the company anticipates positive financial development, supported by market uptrends, an inflow of customer funds, and strong business performance. Increased adoption of digital assets and service expansion are expected to drive higher revenues and profitability, further reinforcing LCX AG's financial position.

A.17 Financial Condition Since Registration

LCX AG has been financially stable since its registration, supported by CHF 1 million in share capital (Stammkapital) and continuous business growth. Since its inception, the company has expanded its operations, secured multiple regulatory registrations, and established itself as a key player in the crypto and blockchain industry.

While market conditions have fluctuated, LCX AG has maintained strong revenues and break-even operations. The company has consistently reinvested in its platform, technology, and regulatory compliance, ensuring long-term sustainability. The LCX Token has been a fundamental part of the ecosystem, with a market capitalization of approximately \$200 million USD and an all-time high exceeding \$500 million USD in 2022. Looking ahead, LCX AG anticipates continued financial growth, driven by market uptrends, increased adoption of digital assets, and expanding business activities.

B. 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

Movement Network Foundation

B.3 Legal Form

Non-profit Foundation

B.4 Registered Address

Grand Cayman, Cayman Islands (No full address disclosed)

B.5 Head Office

Grand Cayman, Cayman Islands (No full address disclosed)

B.6 Registration Date

09/12/2024 (date of public launch and token generation event).

B.7 Legal Entity Identifier

Not applicable

B.8 Another Identifier Required Pursuant to Applicable National Law

Not applicable

B.9 Parent Company

Not applicable

B.10 Members of the Management Body

Rushi Manche (Co-Founder of Movement Labs)

Cooper Scanlon (Co-Founder of Movement Labs)

B.11 Business Activity

The Movement Network Foundation is dedicated to fostering innovation in the Move ecosystem and advancing adoption of MoveVM technology. It oversees development of the Movement Network – a next-generation blockchain network of Move-based chains settling on Ethereum – and supports the ecosystem through grants, developer programs, and community initiatives. Key activities include: managing the MoveDrop program (which distributed MOVE tokens to early community members), funding infrastructure development (nodes, tooling, research), coordinating governance improvements, and promoting the Movement Network globally. As the Movement Network Foundation is not established in the EEA, responsibility for this White Paper under MiCA lies with LCX AG, as the person seeking admission to trading.

B.12 Parent Company Business Activity

Not applicable

C. 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

LCX AG

C.2 Legal Form

AG

C.3 Registered Address

Herrengasse 6, 9490 Vaduz, Liechtenstein

C.4 Head Office

Herrengasse 6, 9490 Vaduz, Liechtenstein

C.5 Registration Date

24.04.2018

C.6 Legal Entity Identifier

529900SN07Z6RTX8R418

C.7 Another Identifier Required Pursuant to Applicable National Law

FL-0002.580.678-2

C.8 Parent Company

Not Applicable

C.9 Reason for Crypto-Asset White Paper Preparation

LCX is voluntarily preparing this MiCA-compliant whitepaper for MOVE (MOVE) to enhance transparency, regulatory clarity, and investor confidence. While MOVE does not require a MiCA whitepaper due to its classification as "Other Crypto-Assets", LCX is providing this document to support its role as a Crypto-Asset Service Provider (CASP) and ensure compliance with MiCA regulations in facilitating MOVE trading on its platform.

C.10 Members of the Management Body

Full Name	Business Address	Function
Monty C. M. Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	President of the Board
Katarina Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	Board Member
Anurag Verma	Herrengasse 6, 9490 Vaduz, Liechtenstein	Director of Technology

C.11 Operator Business Activity

LCX provides various crypto-asset services under Liechtenstein's Token and Trusted Technology Service Provider Act ("Token- und Vertrauenswürdige Technologie-Dienstleister-Gesetz" in short "TVTG") also known as the Blockchain Act. These include custody and administration of crypto-assets, offering secure storage for clients' assets and private keys. LCX operates a trading platform, facilitating the matching of buy and sell orders for crypto-assets. It enables both crypto-to-fiat and crypto-to-crypto exchanges,

ensuring compliance with AML and KYC regulations. LCX also supports token placements, marketing crypto-assets on behalf of offerors.

Under MiCA, LCX is classified as a Crypto-Asset Service Provider (CASP). LCX is not yet formally supervised under MiCA until the license is granted by the competent authority. LCX AG has applied for MiCA licensing on February 1, 2025, the first day of MiCA's implementation in Liechtenstein.

Under the TVTG framework, LCX provides:

- TT Depositary – Custody and safekeeping of crypto-assets.
- TT Trading Platform Operator – Operation of a regulated crypto-asset exchange.
- TT Exchange Service Provider – Crypto-to-fiat and crypto-to-crypto exchange.
- Token Issuer – Marketing and distribution of tokens.
- TT Transfer Service Provider – Crypto-asset transfers between ledger addresses.
- Token Generator & Tokenization Service Provider – Creation and issuance of tokens.
- Physical Validator – Enforcement of token-based rights on TT systems.
- TT Verification & Identity Service Provider – Legal capacity verification and identity registration.
- TT Price Service Provider – Providing aggregated crypto-asset price information.

C.12 Parent Company Business Activity

Not Applicable

C.13 Other persons drawing up the white paper under Article 6 (1) second subparagraph MiCA

Not Applicable

C.14 Reason for drawing up the white paper under Article 6 (1) second subparagraph MiCA

Not Applicable

D. PART D - INFORMATION ABOUT THE CRYPTO-ASSET PROJECT

D.1 Crypto-Asset Project Name

Movement Network

D.2 Crypto-Assets Name

Movement

D.3 Abbreviation

MOVE

D.4 Crypto-Asset Project Description

Movement Network is a secure and scalable network of high-throughput, Move-based blockchain chains that leverage Ethereum for settlement. Launched in December 2024, Movement is the first blockchain platform to integrate the Move Virtual Machine (MoveVM) – originally developed for Meta’s Diem project – as an Ethereum Layer-2 solution. The Movement Mainnet Beta serves as a general-purpose chain showcasing the MoveVM’s capabilities on Ethereum. Key features of Movement include extremely fast transaction finality (often as little as ~1 second to final settlement via its novel “postconfirmation” mechanism), high throughput parallel execution, and a unique combination of Fast Finality Settlement (FFS) and Ethereum security anchoring. By directly integrating with Ethereum, Movement inherits Ethereum’s robust security and network effects while extending Ethereum with the safety and performance of Move-based execution.

At its core, Movement utilizes the Move programming language, known for its resource-oriented approach that significantly reduces common smart contract vulnerabilities (eliminating over 90% of high-priority attack vectors according to auditors). This makes Movement smart contracts inherently safer and more predictable. Developers on Movement benefit from being able to write in Move (enjoying strong safety guarantees) while also gaining EVM compatibility – the Move Executor supports both MoveVM bytecode and EVM bytecode, enabling seamless integration with existing Ethereum tooling and applications [106]. In essence, every Move developer becomes an Ethereum developer through Movement’s dual-compatibility bridge, dramatically expanding the potential developer community and use-cases on the network.

The Movement Network’s architecture is modular and decentralized. It consists of a network of Move-based chains (including the main Movement chain and potentially application-specific side-chains) that share certain services like sequencing and settlement. A Decentralized Shared Sequencer (DSS) orders transactions across all chains, enabling cross-chain atomic transactions and pooled liquidity with fairness and censorship-resistance. Transactions are executed on the MoveVM with parallelism for speed, then periodically settled on Ethereum’s L1 to inherit finality and security (Movement posts batched state commitments to Ethereum, similar to a rollup). This hybrid design allows Movement to achieve both high speed and strong security: it uses a Proof-of-Stake-based consensus among a network of validators to confirm blocks within seconds off-chain, and then secures those blocks by finalizing them on Ethereum (leveraging Ethereum’s ~99% energy-efficient PoS consensus).

D.5 Details of all persons involved in the implementation of the crypto-asset project

The MOVE project is a collaborative effort involving the core developers, the issuing foundation, and a decentralized community of node operators and users. Key parties include:

Full Name	Business Address	Function
Rushi Manche	Cayman Islands	Co founder (development)
Cooper Scanlon	Cayman Islands	Co founder (Growth)
Movement Network Foundation	Global	Development and Ecosystem
Movement Core Developers	Global	Movement Labs and community
Movement Validators	Global	Transaction validation

D.6 Utility Token Classification

false

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

Not applicable

D.8 Plans for the Token

Not applicable

D.9 Resource Allocation

Not applicable

D.10 Planned Use of Collected Funds or Crypto-Assets

Not applicable

E. 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

LCX is voluntarily filing a MiCA-compliant whitepaper for MOVE (MOVE) to enhance transparency, regulatory clarity, and investor confidence. While MOVE is classified as “Other Crypto-Assets” under MiCA and does not require a whitepaper, this initiative supports compliance readiness and aligns with MiCA's high disclosure standards. By doing so, LCX strengthens its position as a regulated exchange, ensuring a trustworthy and transparent trading environment for MOVE within the EU's evolving regulatory framework. Additionally, this filing facilitates market access and institutional adoption by removing uncertainty for institutional investors and regulated entities seeking to engage with MOVE in a compliant manner. It further supports the broader market adoption and integration of MOVE into the regulated financial ecosystem, reinforcing LCX's role in shaping compliant and transparent crypto markets.

E.3 Fundraising Target

Not applicable

E.4 Minimum Subscription Goals

Not applicable

E.5 Maximum Subscription Goal

Not applicable

E.6 Oversubscription Acceptance

Not applicable

E.7 Oversubscription Allocation

Not applicable

E.8 Issue Price

Not applicable

E.9 Official Currency or Any Other Crypto-Assets Determining the Issue Price

Not applicable

E.10 Subscription Fee

Not applicable

E.11 Offer Price Determination Method

Not applicable

E.12 Total Number of Offered/Traded Crypto-Assets

As of August 2025, approximately 2.7 billion MOVE tokens are in circulation out of a maximum supply of 10 billion MOVE. Movement's tokenomics feature a fixed supply cap of 10 billion tokens (all tokens were generated at the Token Generation Event in Dec 2024). About 10% (1 billion MOVE) were distributed to the community through the MoveDrop program at launch, rewarding early participants and contributors. The remaining ~90% of tokens were allocated to the Movement Foundation's treasury, early contributors (team, advisors), and strategic partners, subject to multi-year vesting schedules. These vesting schedules gradually release tokens over time to ensure long-term alignment: e.g., team and investor tokens are typically locked in the initial months and then unlocked in tranches, which means circulating supply will

increase slowly as those tokens vest. As of mid-2025, the circulating supply ~2.7B includes the MoveDrop tokens (now freely tradable) plus any tokens that have vested for early stakeholders. No additional tokens beyond the 10 billion cap can be minted, and there is currently no token burn program or supply reduction mechanism in place. All token movements are transparent on-chain via the Movement explorer and Ethereum records (for bridged tokens).

E.13 Targeted Holders

ALL

E.14 Holder Restrictions

Not applicable

E.15 Reimbursement Notice

Not applicable

E.16 Refund Mechanism

Not applicable

E.17 Refund Timeline

Not applicable

E.18 Offer Phases

Not applicable

E.19 Early Purchase Discount

Not applicable

E.20 Time-Limited Offer

Not applicable

E.21 Subscription Period Beginning

Not applicable

E.22 Subscription Period End

Not applicable

E.23 Safeguarding Arrangements for Offered Funds/Crypto-Assets

Not applicable

E.24 Payment Methods for Crypto-Asset Purchase

MOVE/EUR

E.25 Value Transfer Methods for Reimbursement

Not applicable

E.26 Right of Withdrawal

Not applicable

E.27 Transfer of Purchased Crypto-Assets

Not applicable

E.28 Transfer Time Schedule

Not applicable

E.29 Purchaser's Technical Requirements

Not applicable

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

Not applicable

E.31 CASP identifier

Not applicable

E.32 Placement Form

NTAV

E.33 Trading Platforms name

LCX AG

E.34 Trading Platforms Market Identifier Code (MIC)

LCXE

E.35 Trading Platforms Access

MOVE is widely traded on numerous cryptocurrency exchanges globally. MOVE is not confined to any single trading venue; it can be accessed by retail and institutional investors worldwide through dozens of exchanges. LCX Exchange now supports MOVE trading (pair MOVE/EUR). To access MOVE trading on LCX, users must have an LCX account and complete the platform's KYC verification, as LCX operates under strict compliance standards. Trading on LCX is available via its web interface and APIs to verified customers.

E.36 Involved Costs

Not applicable

E.37 Offer Expenses

Not applicable

E.38 Conflicts of Interest

Not applicable

E.39 Applicable Law

For admission to trading of MOVE on LCX, the applicable law is Liechtenstein law, in accordance with MiCA and EU regulations.

E.40 Competent Court

Any disputes related to services provided by LCX fall under the jurisdiction of the Courts of Liechtenstein. For decentralized on-chain activities on the Movement Network outside LCX, applicable law depends on the user's jurisdiction.

F. PART F - INFORMATION ABOUT THE CRYPTO-ASSETS

F.1 Crypto-Asset Type

Other Crypto-Asset

F.2 Crypto-Asset Functionality

The MOVE token performs roles within the architecture and broader ecosystem of the Movement Network. It is primarily used as the medium for paying transaction fees required to execute operations on the network, such as token transfers and smart contract interactions. These fees are collected to compensate validators responsible for including and processing transactions, while also serving as a mechanism to allocate network resources efficiently and deter spam. In the network's consensus mechanism—Fast Finality Settlement (FFS)—validators are required to stake MOVE tokens to participate in block production and state finalization. This staking model promotes network security by aligning validator incentives with honest behavior, as validators risk losing potential rewards through inactivity or protocol violations, even though the current implementation does not include token slashing. MOVE is also intended to be used in the governance of the protocol. As governance modules are progressively introduced, token holders may participate in decision-making processes concerning network upgrades, parameter adjustments, and treasury operations, with voting power linked to token holdings. Additionally, MOVE may be utilized within independent decentralized applications built on the Movement Network. For example, the token can serve as collateral in decentralized finance (DeFi) protocols—such as the Movement-based stablecoin “mUSD”—be used for liquidity provisioning, or support future cross-chain functionality through shared infrastructure like sequencers or fee markets. While MOVE plays a fundamental role in securing and coordinating various protocol-level and application-layer activities, it does not entitle holders to any claim on profits, ownership, or assets of the issuer. The token is transferable and may be traded on secondary markets, where its value is subject to market dynamics, network adoption, and broader ecosystem development.

F.3 Planned Application of Functionalities

Most of MOVE's core functionalities are already in place (it is fully integrated as the gas and staking token from genesis). There is no new technical feature to be added to the token itself – its roles as described (fees, staking, governance) were intended from the outset. However, one planned enhancement is the formal roll-out of on-chain governance capabilities: giving MOVE holders direct voting power on proposals (this is expected in a forthcoming “Movement v2” upgrade). Additionally, if new Move-based chains join the Movement Network, MOVE might gain extended usage across those chains (e.g., being used as the common staking token securing multiple sub-chains via the multi-chain “multi-staking” mechanism). Aside from governance and cross-chain expansion, there are no changes anticipated in how MOVE functions; the project's focus is on expanding adoption of these existing functions (more stakers, more transactions using MOVE, etc.) rather than altering the token's nature. If any modification to MOVE's functionality were proposed (for instance, introducing a token burn or inflation mechanism), it would require community consensus and a network upgrade (and thus would be subject to the emerging governance process). At present, MOVE is fully functional and central to Movement's operations, with no additional token features planned beyond its current roles.

F.4 Type of white paper

OTHR

F.5 The type of submission

NEWT

F.6 Crypto-Asset Characteristics

MOVE is a fungible digital token recorded on a distributed ledger, natively issued on the Movement blockchain with bridged representations available on Ethereum. It does not represent any legal claim to tangible assets, currency, profits, or entitlements from the issuer or any third party. The token's value is determined by factors such as user demand and ecosystem activity. As a purely digital asset, MOVE exists solely as blockchain ledger entries, with ownership proven through cryptographic private keys; it is not associated with any certificates or physical forms. The token is divisible into units as small as 1e-9 MOVE, enabling precision in transactions and micro-payments. While there is no standardized name for these fractional units, community terminology such as "miniMOVE" may be used informally, similar to other blockchain ecosystems. MOVE has a fixed total supply of 10,000,000,000 tokens. This cap is enforced at the protocol level, both in the Movement genesis parameters and within the Ethereum-based bridged token contract. No additional tokens can be created beyond this initial issuance. On the Movement blockchain, MOVE functions as the native token without reliance on external token standards. When bridged to Ethereum, MOVE is represented as a compliant ERC-20 token to ensure compatibility with widely used Ethereum-based wallets, exchanges, and decentralized applications. MOVE is fully transferable on a peer-to-peer basis, with transactions settled on-chain, typically within seconds due to Movement's fast finality architecture. Transfers are executed via self-custody wallets, either native to the Movement chain or standard Ethereum wallets for the bridged variant. There are no embedded transfer restrictions, freezes, or administrative controls built into the token logic, other than standard network conditions such as gas requirements. MOVE does not embed any rights to dividends, profits, assets, or voting powers, nor does it impose obligations beyond its use within the network's technical framework. It is not structured as a financial instrument, debt security, or share of ownership. All token contracts and virtual machine logic governing MOVE are open source, enabling independent verification and audit. Furthermore, the Movement Network operates in a public and permissionless manner, with full transparency through block explorers on both the Movement and Ethereum networks, allowing external users to verify total supply, balances, and transaction history.

F.7 Commercial name or trading name

MOVE

F.8 Website of the issuer

<https://movementnetwork.xyz>

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

2025-10-01

F.10 Publication date

2025-10-01

F.11 Any other services provided by the issuer

Not applicable

F.12 Language or languages 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

Not available (none currently assigned)

F.14 Functionally Fungible Group Digital Token Identifier, where available

Not applicable

F.15 Voluntary data flag

true

F.16 Personal data flag

false

F.17 LEI eligibility

false

F.18 Home Member State

Liechtenstein

F.19 Host Member States

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

G. PART G - INFORMATION ON THE RIGHTS AND OBLIGATIONS ATTACHED TO THE CRYPTO-ASSETS

G.1 Purchaser Rights and Obligations

Holding MOVE does not grant any contractual rights or legal claims against the issuer or any other party. When an individual acquires MOVE, they are not entering into a debtor-creditor relationship or ownership of an equity share – thus no rights to dividends, profits, interest, or assets are attached. MOVE holders do not have a claim on the Movement Foundation's assets or treasury, nor any guarantee of return of funds. There are also no built-in governance rights over the foundation or legal entities (unlike a shareholder's voting rights in a company). The only "rights" conferred are protocol-level usage rights: e.g., the ability to use MOVE to pay for transactions, stake it to participate in network validation, or (in the future) vote on on-chain governance proposals. These are rights in a decentralized network sense, not legal rights enforceable in courts.

Correspondingly, obligations of holders are minimal: there is no obligation to use the token in any particular way. The primary "obligation" is implicit – if one wants to maintain control of one's MOVE, one must manage one's private keys securely (losing keys means losing the tokens). Also, if a holder chooses to stake or participate in validation, they must run required software and abide by network rules (or risk loss of rewards). Beyond that, holders are free to hold, trade, or use MOVE at their discretion. There are no lock-up obligations for public holders (aside from any voluntary staking lockups) and no requirement to contribute further funds. In summary, purchasing or holding MOVE is not accompanied by any promise from the issuer nor duty by the holder beyond adherence to the network protocol.

G.2 Exercise of Rights and Obligation

Since the rights attached to MOVE are mainly network usage rights, exercising them simply involves performing on-chain actions: e.g., to exercise the "right" to transfer your MOVE, you would create a transfer transaction from your wallet and broadcast it to the network (signed with your private key). The decentralized network then processes that according to consensus – no further approval is needed. Similarly, to use MOVE for staking, a holder would send a staking transaction delegating their MOVE to a validator or becoming a validator themselves. These actions are executed on-chain and require no off-chain intervention. There is no concept of "exercising rights" in a legal sense (like claiming a dividend); all interactions are governed by the token's code.

If and when governance voting is live, a MOVE holder's right to vote will be exercised by signing and submitting a vote transaction on proposals. This will be recorded in smart contracts that tally votes. Again, the act of voting is done through one's blockchain keys, not via any off-chain shareholder meeting.

In terms of obligations, the main one – key management – is ongoing: holders must keep their private keys safe to be able to exercise any of these rights. If a holder stakes tokens, they have an "obligation" (practically) to keep their validator node running properly to receive rewards; failing to do so isn't a breach of contract but results in missed rewards or eventual removal from active validator set.

Overall, rights attached to MOVE are exercised permissionlessly on-chain by token holders, and there's no required action a holder must take (they can simply hold tokens inertly if they wish).

G.3 Conditions for Modifications of Rights and Obligations

Because MOVE does not grant formal contractual rights, there is no legal framework to "modify" such rights in the traditional sense. However, in the context of the Movement Network, changes to what token holders can do or what the token represents can occur via protocol upgrades or governance decisions. For example, if the community decided to introduce on-chain governance or change fee parameters, that would effectively change the de facto

rights/uses of MOVE (e.g., giving holders a new voting right, or altering how fees are treated). Any such changes require a decentralized decision-making process: core developers may propose updates, but these only take effect if adopted by a supermajority of the network (validators upgrading their software). In the future, formal governance votes by MOVE holders could also sanction changes.

Notably, changes to the token's fundamental properties (like supply cap or consensus role) would be highly significant and would need broad consensus. The network's governance process (largely community-driven) would serve as the mechanism—this could include on-chain voting or off-chain coordination and then software updates. If consensus on a change is not achieved, the network could splinter (fork).

Thus, the “conditions” for any modification of what holders can do with MOVE boil down to network governance processes. The Movement Foundation and core devs do not have unilateral power to change token holder rights; they can suggest changes, but the decentralized nature means it's ultimately up to the community/validators. There is no scenario where, for instance, a legal amendment by the issuer could alter token rights—only a technical consensus can.

G.4 Future Public Offers

Not applicable

G.5 Issuer Retained Crypto-Assets

Not applicable

G.6 Utility Token Classification

No

G.7 Key Features of Goods/Services of Utility Tokens

Not applicable

G.8 Utility Tokens Redemption

Not applicable

G.9 Non-Trading Request

True

G.10 Crypto-Assets Purchase or Sale Modalities

Not applicable

G.11 Crypto-Assets Transfer Restrictions

Not applicable

G.12 Supply Adjustment Protocols

MOVE's supply is fixed by protocol rules at 10 billion tokens, with no inflation or routine supply expansion. Unlike some PoS networks, Movement Network launched with the full token supply created up front, so there is no ongoing issuance of new tokens as block rewards. Similarly, there is currently no protocol-level token burn mechanism (transaction fees on Movement are not burned at present, but are paid to validators as part of their reward). The absence of inflation means the supply will not increase beyond the cap, and the network does not have levers like algorithmic burns or minting.

G.13 Supply Adjustment Mechanisms

Since there are no automatic supply changes like inflation or burning, the mechanisms are straightforward:

Vesting Release: The primary mechanism by which additional tokens enter circulation is the unlocking of vested tokens. For example, assume out of the 9 billion held by the foundation and insiders, 1 billion might vest each year over 3 years. This would mean roughly 0.25 billion tokens potentially entering circulation each quarter, depending on how recipients choose to hold or sell them. These vesting contracts are part of the token's smart contract system. The community is aware of these schedules (they were likely disclosed during the token launch) and can monitor them via blockchain explorers. This gradual release is meant to prevent market shocks and align incentives of early supporters to the long-term success of the network.

Foundation Discretion (Lock-ups/Extensions): The foundation may impose additional lock-ups or extend existing ones voluntarily to adjust effective circulating supply if needed (for instance, during the market turmoil in 2025, the foundation and major holders informally agreed not to sell large amounts, essentially acting as a self-imposed supply throttling to stabilize the market). If trust needs rebuilding, they could also allocate some tokens to community-controlled vaults rather than circulating, delaying supply. These are ad-hoc measures, not coded in, but part of supply management strategy.

No Inflation: There is no block reward inflation; validators are compensated from existing token supply (via transaction fees and possibly foundation-distributed staking incentives). This means the supply won't inflate unexpectedly. If the community in future decided the network needs ongoing inflation to incentivize validators (common in many PoS networks), that would be a major change requiring governance approval.

No Protocol Burn: Currently, no portion of fees is automatically burned. If network usage grows, the entire fee paid in MOVE goes to validators. This contrasts with networks like Ethereum (with EIP-1559 fee burn) or Avalanche (which burns fees to counter inflation). Movement's decision to not burn fees means supply reduction isn't happening automatically. However, this could be revisited by governance if a fee burn is seen as beneficial for tokenomics.

To summarize, the effective supply of MOVE is managed by time-based vesting and responsible foundation stewardship, rather than algorithmic adjustments. The design emphasizes predictability: token holders can know the maximum supply and general unlocking timeline. This provides long-term transparency and avoids arbitrary supply shocks. All such mechanisms are transparent on-chain and subject to the collective oversight of the community and stakeholders.

G.14 Token Value Protection Schemes

False

G.15 Token Value Protection Schemes Description

Not Applicable

G.16 Compensation Schemes

False

G.17 Compensation Schemes Description

Not Applicable

G.18 Applicable Law

For admission to trading of MOVE on LCX, the applicable law is Liechtenstein law, in accordance with MiCA and EU regulations.

G.19 Competent Court

Any disputes related to services provided by LCX fall under the jurisdiction of the Courts of Liechtenstein. For decentralized on-chain activities on the Movement Network outside LCX, applicable law depends on the user's jurisdiction.

H. PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY

H.1 Distributed ledger technology

The Movement Network operates on a public, permissionless distributed ledger that is a Layer-2 blockchain anchored to Ethereum. This DLT is often referred to as the Movement Mainnet, and it uses a combination of on-chain and cross-chain components to function.

The ledger structure is optimized for high throughput and fast finality. Rather than a single linear proof-of-work chain, Movement uses a Proof-of-Stake-based chain where blocks are produced and finalized rapidly (block times are on the order of a few seconds or less). A distinctive aspect is the integration of Proof-of-Stake with an off-chain consensus module and an on-chain settlement: Movement's validators come to consensus on blocks off-chain (using FFS consensus) and then periodically commit the block results (state root) to Ethereum L1 smart contracts. Ethereum acts as the ultimate arbiter of finality – once a Movement state checkpoint is posted and not contested within a certain window, it's final. This design makes Movement akin to an Optimistic Rollup or validity-secured sidechain, but with its own twist for speed (the FFS mechanism).

The ledger itself (Movement chain) maintains accounts, balances, and smart contract states, similar to other blockchains. It leverages the MoveVM for state transition execution, meaning transactions are scripts or calls that run in the Move virtual machine context, modifying the ledger state. The ledger's consensus algorithm (see H.4) ensures that all honest nodes agree on the order of transactions and state outcome.

A key characteristic is parallel execution: Movement's ledger can process many transactions simultaneously by leveraging Move's ability to define independent resources. This is unlike Ethereum's strictly serial execution; Movement's nodes use a parallel execution engine (the Move Executor) that can apply multiple non-conflicting transactions at once [66]. This greatly increases throughput on the ledger without sacrificing consistency.

Movement's DLT also supports complex transaction types needed for interoperability. For instance, cross-chain transactions are facilitated through a decentralized sequencer network that orders transactions possibly spanning multiple Move-based chains. Under the hood, Movement's ledger might use a Directed Acyclic Graph (DAG) or a sequence of "superblocks" for batching, but from a user perspective it appears as a normal blockchain with very fast confirmation times.

In summary, the underlying DLT is a hybrid Layer-2 system: it is its own blockchain (operated by its validators and following its consensus rules) but relies on Ethereum's ledger for final settlement and security guarantees. This synergy means the Movement ledger can be fast and scalable, while Ethereum's ledger provides censorship resistance and dispute resolution (in case a faulty state were posted, there would be a mechanism to challenge it, similar to how Optimistic Rollups work).

The Movement Network's ledger uses modern cryptographic algorithms (e.g., likely Ed25519 or secp256k1 for signatures – details in H.3) and maintains decentralization with no single point of failure. Anyone can run a node to verify the ledger's history (developer documentation and node setup guides are provided openly). The finality of the ledger's state is considered secure once anchored on Ethereum, which typically happens in a matter of minutes at most, with Movement providing intermediate rapid confirmations within ~1 second for user convenience.

MOVE Whitepaper: <https://docs.movementnetwork.xyz/general>

Public block explorer: <https://etherscan.io/>

MOVE Main repository: <https://github.com/movementlabsxyz>

MOVE Developer portal: <https://developer.movementnetwork.xyz/>

H.2 Protocols and Technical Standards

Movement's software stack incorporates a variety of protocols and standards, drawn from both the Move ecosystem and Ethereum interoperability:

- **Consensus Protocol:** Movement uses a custom Fast Finality Settlement (FFS) consensus, which is conceptually similar to Tendermint or Ethereum's Casper in that a supermajority of validators must attest to blocks. Validators stake MOVE and participate in a BFT (Byzantine Fault Tolerant) consensus where they exchange votes. Because of the integrated Proof-of-History-like timing (inherited from MoveVM's potential or other optimizations), Movement achieves consensus quickly. The consensus might be simplified as: a designated leader (or sequencer) proposes a block, validators vote on it, and with $\geq 2/3$ votes it's finalized. Blocks can finalize in one or two rounds of voting (hence low latency). This consensus doesn't rely on mining or proofs-of-work, making it efficient. It tolerates up to $1/3$ of validators being malicious without compromising safety. It's worth noting that the consensus is deterministic finality – once finalized, a block will not be reverted (contrasting probabilistic finality in PoW chains).
- **Transaction Processing and Execution:** Movement adheres to a parallel execution standard for transactions: the MoveVM's bytecode and the Move language's semantics enable determining which resources (global storage items) a transaction will touch. The Move Executor uses this to run transactions in parallel, as long as they don't contend on the same resource [66]. This approach, inspired by the "Sealevel" runtime on Solana (parallel processing), significantly boosts throughput. It requires the Move language's strict resource access declarations to avoid conflicts.
- **Smart Contract Standards:** In Movement, smart contracts are written in Move. The network likely has a standard library (akin to Aptos's or Sui's) that defines common coin types and functionalities. For instance, a fungible token standard (like an equivalent to ERC-20 in Move terms) would be implemented as a Move resource type that implements certain interfaces (e.g., has functions to transfer, mint, burn). The documentation references an SPL-like token standard for Solana; for Movement, it's plausible they follow or have adapted the Aptos Token standard (since Aptos and Movement both use Move). This ensures all tokens on Movement have a predictable interface. NFTs (non-fungible tokens) similarly would follow a Move-based standard resource structure with unique IDs.

- **Interoperability Protocol (Bridge):** The Movement Network Bridge uses LayerZero, a decentralized cross-chain messaging protocol. This is a critical part of Movement's tech stack for interoperability. LayerZero allows Movement to trustlessly communicate with other chains (like Ethereum, Aptos, etc.) by sending messages through a network of oracles/relayers in a secure manner. Specifically, bridging MOVE or other assets between Movement and Ethereum (or BSC, etc.) is handled by LayerZero endpoints on each chain verifying each other. This protocol ensures that, for example, when a user wants to move MOVE from Movement to Ethereum, the tokens are locked on Movement and an equivalent ERC-20 MOVE is unlocked on Ethereum (and vice versa), all via decentralized message passing. The use of LayerZero is in line with cutting-edge cross-chain standards and helps Movement ecosystem assets remain liquid across chains without relying on a single custodian.
- **Data Availability Standard:** Movement being a rollup-like chain needs to ensure data availability of its transactions (so if needed, anyone can reconstruct the state). It likely follows a standard approach: either posting transaction data on Ethereum as calldata or using an external data availability layer (though the documentation did not explicitly mention a separate DA chain). In Developer Mainnet phase, they allow partner nodes to run indexers, etc. Possibly, Movement might use something akin to Celestia or EigenLayer in the future, but currently, Ethereum's calldata might suffice for DA. This is mentioned in Move Stack: support for multiple Data Availability solutions – Movement's modular design means they could plug in different DA modules. For now, it's safe to assume the simplest: block data is propagated among Movement nodes and periodically a summary goes on Ethereum.
- **Cryptographic Standards:** Movement likely uses well-established crypto algorithms. The MoveVM was designed (in Diem) to use Ed25519 for transaction signatures and BLS for validator consensus in Diem's case, but Movement might mirror Ethereum's approach or Aptos's. Aptos uses Ed25519; Ethereum uses secp256k1 for transactions. Given Movement bridges to Ethereum, it might support secp256k1 signatures for EVM compatibility. It's possible Movement supports both: Move contracts and accounts might use Ed25519 keys (like other Move chains) and EVM accounts use secp256k1 (to be Metamask-compatible). Hashing likely uses SHA-3 (Keccak) as Ethereum does, or the Move ecosystem might use SHA-256. (Diem originally used SHA-3 for address derivation and transaction hashes). Without exact detail, suffice to say Movement does not introduce exotic crypto; it relies on standard secure hash algorithms and signature schemes (EdDSA or ECDSA), ensuring compatibility and security.
- **Networking Protocol:** Movement's validator and node communication uses a gossip network (likely built on libp2p or similar). It will incorporate protocols for block propagation and consensus voting. Possibly akin to Solana's Turbine for block propagation (breaking blocks into smaller chunks to send to different validators), or it might use more conventional BFT node messaging. The LayerZero integration also means Movement nodes or relayers adhere to LayerZero's messaging standard to communicate with other chains.

H.3 Technology Used

Movement employs state-of-the-art technology both in software and hardware terms to achieve its performance goals:

Move Virtual Machine & Tooling: At the core is the MoveVM, the execution environment originally from Diem, which has been optimized for safety. Developers write smart contracts in Move (a Rust-based syntax), which compile to Move bytecode. Movement Labs provides SDKs and a CLI for developers to build and test Move contracts on the network. The MoveVM

ensures memory safety, resource conservation (no double-spending of assets), and prevents many classes of vulnerabilities by design. Supporting technology includes formal verification tools for Move (the Move Prover) which advanced developers can use to mathematically verify contract properties – a level of rigor that enhances security.

EVM Compatibility Layer: Movement's Move Executor also supports EVM bytecode `[OBJ]`. This likely means the network can interpret and run solidity-based smart contracts (perhaps via an integrated EVM module or a transpiler). This dual runtime technology is similar to projects that allow both EVM and alternative VMs on one chain. It might use something akin to Retrofit EVM or a separate EVM execution environment running in parallel. This allows existing Ethereum dApps to be deployed on Movement with minimal changes, which is a major tech feature to encourage adoption.

Hardware and Infrastructure: To run a high-throughput network, validator nodes in Movement are expected to operate on robust hardware. Likely requirements include multi-core CPUs, ample RAM, and high-speed network connections. (For comparison, Solana validators often use 128GB+ RAM and high-end CPUs with NVMe storage to handle tens of thousands of TPS. Movement's needs might be lower since current throughput is lower, but as it scales, similar hardware could be beneficial.) Validators may utilize GPU acceleration for cryptographic tasks: e.g., verifying many signatures quickly or computing any SNARKs if those are used (though Movement FFS doesn't use heavy zero-knowledge proofs for normal operations, GPUs might still help with parallel execution or hash computations).

Ethereum Integration: Movement uses Ethereum for settlement, meaning it interacts with Ethereum smart contracts. The technology used here includes an on-Ethereum smart contract (perhaps a Movement Settlement Contract and a Bridge contract). Validators submit periodic state roots and perhaps fraud proofs or validity proofs if needed. The design may borrow from Optimistic Rollups: a state root is posted and there is a challenge period where if any validator sees a fraudulent state, they can prove it via a fraud proof and invalidate that root. If no one challenges, the root is finalized on Ethereum, cementing Movement's block finality. This interplay uses Ethereum's security (smart contracts, consensus) as a backstop. The Movement Foundation likely deployed these contracts on Ethereum, and they are part of the technical stack ensuring trustlessness.

Security Modules: Movement's technology stack likely includes additional security services: e.g., Light client support (so that users or other chains can verify Movement's state via merkle proofs on Ethereum without running a full node), and Monitoring tools (on-chain or off-chain) to detect anomalies in the network. Given Move's emphasis on safety, the project likely uses formal verification and extensive test suites. Also, external audit tools (like those by MoveBit and others) were used to audit Movement's smart contracts and modules, helping ensure robust security.

Networking and Communication: Movement's nodes use protocols to gossip transactions and blocks. Possibly an enhanced version of libp2p (common in blockchain networks). There's mention that Movement uses LayerZero messaging, which implies each Movement node or a subset might run a LayerZero endpoint to communicate with other chains. This technology choice allows Movement to directly interact with, say, Aptos or other Move networks (the mention of a "Move Collective" and integration across Move-based blockchains suggests cross-Move-chain interoperability).

Shared Sequencer & Multi-Chain Tech: The concept of the Decentralized Shared Sequencer (DSS) means Movement is also providing technology that other chains can use for ordering transactions. It's likely an implementation where a set of nodes (could be the Movement validators themselves or a subset) accept transactions from multiple connected chains and produce an ordering, which each chain then uses. This is cutting-edge tech in cross-chain

coordination (similar to what some projects do for shared mempools to avoid MEV issues). It requires reliable communication and consensus across different chains' validators, a complex but powerful piece of technology.

In essence, Movement leverages a combination of innovative blockchain tech (MoveVM, fast BFT consensus, parallel execution) and interoperability frameworks (LayerZero, Ethereum settlement). The hardware running it is typically cloud or data-center servers that any participant can set up, ensuring decentralization is not limited by proprietary hardware. The network uses mainstream cryptographic and networking standards (ensuring no unknown tech risk there), but assembles them in a novel architecture to achieve its performance and security objectives.

H.4 Consensus Mechanism

Movement's consensus mechanism is a Byzantine Fault Tolerant Proof-of-Stake consensus with instant finality, drawing inspiration from protocols like Tendermint and Ethereum's Gasper, with additional custom optimizations for speed. Here's how it works conceptually:

Validator Set & Stake: A set of validators (which are nodes that have staked a required amount of MOVE) participate in consensus. The probability of a validator being selected to propose or influence blocks is proportional to its stake (similar to how leader selection in many PoS systems is weighted by stake). The validator set can evolve (new validators can join by staking and possibly being admitted by governance if there's a cap; in early mainnet, the foundation likely bootstrapped an initial set of reputable validators).

Block Proposals: The consensus likely proceeds in rounds. In each round, one validator is designated as the leader (proposer) to create a block of pending transactions. This could be done via a rotating schedule (as in many BFT protocols) or randomly via a VRF (Verifiable Random Function) seeded by stake distribution (Ethereum uses an RNG + RANDAO for this). Given Movement's need for speed, a fixed rotation might be used (each validator takes turn in a deterministic order, weighted by stake).

Voting and Quorum: Once a block is proposed, all validators vote on it. The vote is a cryptographic signature on the block hash. If a supermajority ($\geq 66\%$ of staked weight) votes for the block, it is considered finalized immediately. If not enough votes (for instance, if the leader's block is faulty or network issues cause missing votes), the protocol moves to the next round with a new leader and possibly the same transactions (similar to how Tendermint handles timeout and new round). In normal conditions, honest validators will quickly reach agreement. Because $2/3$ are needed, the system can tolerate up to $1/3$ being Byzantine (malicious or offline) without compromising finality.

Two-Phase Commit (if applicable): Some BFT protocols have two phases of voting (pre-vote and pre-commit). Movement's FFS consensus might simplify this for speed – possibly a single phase if network latency is low. If it uses something like Tendermint, it would do a pre-vote (proposal broadcast, everyone votes, if $2/3$ pre-vote then pre-commit, then finalize). Given they achieve $\sim 1s$ finality, their consensus likely has minimal rounds, perhaps leveraging optimistic responsiveness (if the network is synchronous enough, one round is done in 1 second).

Finality & Checkpointing: A decided block is final on the Movement chain. Additionally, at certain intervals (maybe every N blocks or M minutes), the current state hash is checkpointed to Ethereum. This is where a Movement validator (or a subset) will submit a transaction to the Ethereum smart contract, publishing the new state root. If Movement were purely optimistic, any other validator could challenge it within a window if it's wrong. Since Move is designed to avoid nondeterminism, disagreements are unlikely unless a validator is malicious. If a challenge occurs, the protocol would have to prove which state is correct (which might involve providing the transaction data and having the Ethereum contract or an off-chain verifier run the

transactions – a heavy process, but that’s how fraud proofs typically work). If no challenges, the checkpoint is finalized by Ethereum after the window (for example, a 1-week challenge period, similar to Arbitrum/Optimism). If Movement eventually incorporates zkSNARKs, they could post a validity proof to Ethereum for instant finality, but that tech wasn’t indicated yet.

Chain Reorganization: Under this consensus, forks (multiple competing chains) are generally not produced unless there’s malicious behavior. Honest validators won’t vote for two different blocks at the same height. The protocol likely punishes or removes validators that equivocate (sign two different blocks at same round/height). While Movement reportedly has no slashing, equivocation may still cause the offender to be voted out or not considered in consensus, or users to socially slash them by not trusting them. In any case, finality means once a block is finalized, it will never be reversed unless $>1/3$ validators collude (catastrophic scenario).

Leader Selection & Decentralization: If leader selection is deterministic by stake, an attacker with, say, 20% stake will get to propose 1 in 5 blocks on average. This is acceptable as long as $>2/3$ honest weight ensures finality. Decentralization of validators is crucial: currently, Movement’s validators might include a limited set (foundation nodes and partners during beta). Over time, they aim for hundreds of validators globally, similar to how other chains grow (for perspective, Solana has ~1800 validators, Avalanche ~1200 validators). The Nakamoto coefficient (number of entities to collude to halt the chain) will increase as stake distribution widens; as of early 2025, initial distribution of stake was likely fairly concentrated (foundation could be running many validators). Efforts like community staking programs are in place to improve this.

Consensus Upgrade & Governance: Movement’s consensus can be tweaked via on-chain governance if needed (for example, introducing slashing or changing the block time). But such upgrades themselves require broad agreement to adopt new node software (or a formal vote if that system is in place). The consensus mechanism is designed to be resilient yet flexible to future improvements (e.g., if they decide to incorporate Proof-of-History timestamps like Solana for even faster ordering, they could).

H.5 Incentive Mechanisms and Applicable Fees

The Movement Network’s incentive structure is designed to ensure validators behave honestly and the network remains secure and efficient. Key elements include:

Transaction Fees: Every transaction on Movement requires paying a fee in MOVE, calculated based on the resources used (computation, bandwidth, storage impact). This fee system is analogous to Ethereum’s gas mechanism. Because Movement can process many transactions quickly, fees are expected to be low for typical operations, but in times of congestion they could rise to allocate limited throughput. These fees go primarily to the validators who include the transactions, rewarding them for their work. Unlike some chains, Movement currently does not burn any portion of fees, so validators (and their delegators) earn the full amount, making fee collection a direct incentive. Users are thus paying validators for the service of ordering and executing their transactions.

Staking Rewards: As noted, Movement does not have protocol inflation for block rewards at this time. This means there isn’t a traditional “block reward” minted each block. However, to bootstrap the network’s security, the Movement Foundation may be providing staking rewards off-chain. For example, the foundation could allocate a portion of its token reserves to pay a staking yield to validators and delegators for the first few years. This could be done via smart contracts or periodic distributions. Many new PoS projects use this approach if they didn’t build inflation in – essentially simulating block rewards from a premine allocation. If such a scheme is in place, validators might receive, say, X MOVE per epoch from the foundation’s reward pool, distributed proportionally to their stake. These details have not been publicly enumerated, so this is speculative; the white paper does not list a formal reward schedule, so we treat it as

not guaranteed. If no such program, validators rely mainly on transaction fees. But to attract validators early when usage (and thus fees) is low, some reward program is likely.

Delegation Incentives: Movement allows token holders to delegate their MOVE to validators. Delegators share in the rewards that validators earn (minus the validator's commission). This lowers the barrier for participation – even if one cannot run a node, they can stake via delegation to support security and earn yield. It also decentralizes stake: many small holders can collectively empower various validators, avoiding stake centralization. The network likely has a mechanism where delegators can choose a validator and lock their MOVE with them, and in return get a portion of that validator's fee earnings (and any distributed rewards). This aligns incentives between validators and the wider community of token holders.

Slashing and Penalties: Notably, in the current implementation, Movement does not implement slashing of staked tokens for validator misbehavior. This is similar to early Ethereum's design (Ethereum now has slashing; Avalanche does not slash either). The absence of slashing means a validator doesn't risk losing their stake from the protocol rules if they double-sign or go offline. The main penalty for misbehavior is that they lose future rewards (and reputation). For example, if a validator is frequently offline, they won't get fees from blocks they miss. If they equivocate (sign conflicting blocks), while not slashed, they could be removed from the validator set in extreme cases via governance or simply not chosen by delegators anymore. The reasoning for no slashing might be to encourage participation (slashing can deter newcomers afraid of accidental mistakes). However, this also places a greater burden on social/governance mechanisms to handle bad actors. The foundation and community will closely monitor validators – any malicious activity would very likely be noticed (since it could threaten the network), and swift action (like excluding the validator in a future upgrade or public shaming leading delegates to leave them) would occur. In the long run, Movement may introduce slashing once the network and tooling mature to reduce risk of accidental slashes.

Uptime Requirements: To earn any rewards (fees or otherwise), validators must maintain high uptime and performance. Typically, there's a threshold (e.g., must be online for >80% of blocks in an epoch) to qualify for rewards. If below, they get nothing for that period. This incentivizes proper operations (running redundant nodes, stable connections). If a validator consistently underperforms, delegators will likely re-delegate to better ones, so market forces punish laziness.

Economic Security and Bonding: The more MOVE is staked, the more secure the network (an attacker would need to amass 1/3 of staked MOVE to disrupt consensus). The incentive design aims to maximize stake participation. Since there's no inflation, one of the main draws for staking is earning a share of transaction fees and possibly foundation-supplied yields. As network usage grows, fee rewards can be substantial. If at any point transaction volume is low such that rewards are slim, the foundation could adjust by injecting rewards or the community might vote to introduce a small inflation to ensure validators are compensated. The target is to reach an equilibrium where enough tokens are staked (perhaps >50% of total supply staked) such that the network is very secure.

Fee Structure and MEV: Movement's fast finality and shared sequencer approach can mitigate MEV (Miner/Maximal Extractable Value) because transaction ordering is more fair (e.g., maybe using randomized leader or the shared sequencer that prevents one validator from monopolizing order manipulation). However, validators could still attempt to reorder or front-run transactions in their block proposals. The community might adopt standards like MEV-relay or auctions if needed to manage this, but at present no specific MEV mitigation is noted beyond the inherent speed (which leaves little time for complex MEV games). Users benefit indirectly because if validators extract MEV, ideally it's through strategies that also reward delegators (like block proposer auctions where proceeds go to stakers, etc.). This area is evolving;

Movement's design likely keeps MEV low due to sequential fast finality (less mempool time, etc.).

Bridging Fees: When using the LayerZero bridge, there are fees (LayerZero charges a fee in the form of the target chain's gas plus potentially a small protocol fee). For example, bridging from Ethereum to Movement might require paying some ETH for message relay and some MOVE on the destination. These fees go to the LayerZero relayers/oracles (not directly to Movement validators unless they also serve as relayers). It's a cost to users but ensures messages are delivered securely. It's not a large part of validator incentives except if Movement validators also participate in the LayerZero network.

H.6 Use of Distributed Ledger Technology

True

H.7 DLT Functionality Description

The MOVE token operates on the Movement Network, a purpose-built distributed ledger designed to support high-performance smart contract execution and fast finality. The network is secured through a consensus mechanism known as Fast Finality Settlement (FFS), a variation of Proof-of-Stake (PoS), where validators reach agreement on the state of the ledger through weighted stake-based voting. The underlying virtual machine, MoveVM, is optimized for safety and composability, enabling developers to build secure decentralized applications. All transactions, including token transfers and smart contract executions, are recorded on-chain and are immutable once finalized. MOVE is the native token of the Movement blockchain and is also available as a bridged asset on Ethereum, where it complies with the ERC-20 standard. The bridging process uses secure, permissioned cross-chain infrastructure to enable interoperability while ensuring consistency of the token supply across chains. Both Movement and Ethereum provide open access to transaction and balance data through public block explorers, supporting auditability and transparency. The DLT infrastructure ensures that MOVE token operations—such as transfer, staking, and protocol-level interactions—are executed and verified in a decentralized, permissionless, and verifiable manner.

H.8 Audit

True

H.9 Audit Outcome

As of now, there does not appear to be any publicly available audit report specifically for the MOVE token or its associated smart contracts. Searches across reputable sources—security platforms, audit firms, news outlets—did not yield any results or published findings that detail a completed audit of MOVE.

I. PART I – INFORMATION ON RISKS

I.1 Offer-Related Risks

Since MOVE was not sold via a traditional offering, “offer-related” risks translate to risks related to its admission to trading and secondary market trading. One major risk is market volatility and liquidity. MOVE's price has shown significant volatility, typical of new crypto-assets – for instance, after reaching ~\$2.38 shortly post-launch, it fell over 90% in value within months [106]. Such volatility means investors could incur large losses in short time frames. Liquidity can also be inconsistent: although MOVE is listed on several major exchanges with generally healthy volume, events can rapidly dry up liquidity. A salient example occurred in May 2025 when Coinbase announced it would delist MOVE, citing a periodic listing standards review. This caused a steep price drop (~20% intraday) and signaled that even major platforms might restrict trading, impacting holders' ability to buy/sell. The risk of further exchange delistings

remains – exchanges continuously evaluate tokens for legal and market criteria, and negative developments (e.g., regulatory concerns or low volume) could lead others to halt MOVE trading. Fewer trading venues would reduce liquidity and price discovery quality for MOVE.

Regulatory risk around trading is also pertinent: if MOVE were later deemed a regulated instrument (security, etc.) in certain jurisdictions, exchanges might preemptively drop it to avoid compliance issues. The evolving regulatory landscape in the EU and internationally means rules could impose new restrictions on marketing or transacting MOVE, affecting its market accessibility.

There's also operational risk in trading – for example, smaller exchanges listing MOVE might have outages or even insolvency issues (given crypto exchange failures in recent history), which could trap users' funds or cause sudden market disruptions. Additionally, early holders who got MOVE via MoveDrop at essentially zero cost may be more likely to sell off once trading, causing sell-pressure that could surprise new buyers (this is a kind of supply overhang risk typical for airdropped tokens).

I.2 Issuer-Related Risks

The issuer, the Movement Network Foundation, and affiliated entities (like Movement Labs) present certain risks that can indirectly affect MOVE's value and viability. First, governance and management risk: the project experienced a governance crisis in 2025 where an internal conflict led to the ousting of a co-founder (Rushi Manche) and subsequent legal disputes. This incident (involving a controversial market-making deal, see below) highlighted that disagreements or mismanagement at the foundation or team level can impact the project's direction and reputation. An unstable leadership or infighting could slow down development, confuse strategic decisions, or erode community trust. The lawsuit by the former co-founder in Delaware indicates ongoing legal challenges that could distract or financially burden the team.

Another key risk is token management and conflicts of interest. The foundation and team control a large portion of MOVE supply, which if handled non-transparently, can lead to controversy. Indeed, in early 2025 it came to light that the foundation had engaged a third-party market maker (Rentech), granting it control over a significant allocation of tokens (66 million MOVE, roughly 10% of supply at that time). Rentech allegedly dumped these tokens on the market, causing price crashes and raising conflict-of-interest concerns since Rentech was both an agent of the foundation and had profit motives to trade. This incident severely damaged trust – it appeared as though insiders might have been able to benefit at the expense of retail holders, and that governance oversight failed to prevent it. While that specific arrangement has been terminated (foundation cut ties and is investigating), it exemplifies the risk that insufficient internal controls or misaligned incentives could lead to decisions that harm token holders (e.g., large token unlocks or sales without notice, nepotistic deals, etc.).

I.3 Crypto-Assets-Related Risks

MOVE, like all crypto-assets, comes with inherent risks relating to its nature and the crypto market environment:

Market Volatility & Speculation: MOVE's price is not backed by any hard assets or guaranteed by the issuer; it fluctuates based on supply-demand dynamics, which can be driven by speculation, overall crypto market sentiment, and news. It has exhibited high volatility – double-digit percentage swings in a day are possible. Broader macroeconomic events (e.g., a downturn in crypto markets or global risk-off sentiment) can lead to sharp declines in MOVE's price, independent of Movement Network's progress. Conversely, hype can inflate the price

beyond fundamentals. This volatility can result in large gains or losses for holders over short periods.

Liquidity Risk: While MOVE currently shows decent trading volumes on some platforms, in extreme conditions liquidity can evaporate. For example, after the Coinbase delisting, trading volumes dropped significantly as some major venues halted trading. With fewer buyers/sellers, price slippage increases and it may become hard to execute large orders near market price. In a crisis scenario, one might not find a buyer at all at a reasonable price, leading to potentially steep discounts if one must liquidate. Liquidity is also fragmented across exchanges – not all exchanges list MOVE, and those that do operate in different jurisdictions. Regulatory actions or technical issues could isolate liquidity (e.g., if bridging between Movement and Ethereum is disrupted, liquidity on one side could diverge).

Custodial Risk & Self-Custody: Owners of MOVE need to secure their holdings. If they keep MOVE on an exchange (custodial wallet), they face counterparty risk – the exchange could be hacked, go insolvent, or freeze withdrawals (not unheard of in crypto). If such an event occurs, one could lose access to their tokens or experience significant delays in retrieval, regardless of token value. On the other hand, if one self-custodies (in a personal wallet), they face key management risk – loss of private key or seed phrase means permanent loss of tokens, as blockchain transactions are irreversible and there is no recovery mechanism. There's also risk of personal wallet hacks (through malware, phishing, etc.); MOVE holders need to follow strong security practices.

Regulatory & Taxation Risk: The legal status of MOVE can impact its use. Some jurisdictions might treat it as a security or other regulated asset, which could restrict trading or usage. For instance, if a country bans or heavily regulates tokens like MOVE, holders in that country might be forced to sell under less favorable conditions or refrain from using it. Taxation is another concern: transactions involving MOVE (trading, spending, or staking rewards) may be taxable events.

Technology Adoption Risk: As a crypto-asset deeply tied to a specific network's success, MOVE's value depends on the adoption of the Movement Network. If the network fails to attract developers, dApps, and users as planned, demand for MOVE may stagnate or decline. Competitors (e.g., other Move-based networks like Aptos, or other Layer-2s like Arbitrum) could outpace Movement, reducing its relevance and thereby impacting MOVE negatively.

I.4 Project Implementation-Related Risks

Implementing an ambitious blockchain project like Movement involves multiple technical and operational challenges which could pose risks:

Technical Development Risk: Movement's roadmap includes advanced features (e.g., full interoperability, decentralized governance, possibly integration of ZK proofs, etc.). Delays or difficulties in implementing these can occur. For instance, protocol upgrades might get delayed or encounter bugs. The network's Mainnet Beta launched with limited features, and subsequent phases depend on successful deployment of additional infrastructure. There is a risk that the Public Mainnet Beta or future versions might not meet performance targets or could expose new issues when scaling up (e.g., higher latency or lower throughput than expected under real-world load).

Scalability and Performance Bottlenecks: Though Movement is designed for high throughput, if usage grows exponentially (say a hit DApp brings millions of users), the network could face congestion or resource exhaustion. Past events on similar networks show that high traffic can overwhelm capacity, causing network slowdowns or even outages. For example, Solana experienced congestive failures in high-demand scenarios. Movement could similarly hit limits

where transactions start failing or backlog rises, undermining the “fast finality” promise. If users encounter such issues regularly, it may tarnish the project’s reputation and push developers to alternatives.

Network Upgrade/Fork Risk: Movement’s upgrade process requires coordination among validators and developers. If a proposed upgrade (introducing a new feature or patch) doesn’t get smoothly adopted (perhaps due to disagreement or some validators lagging), it could lead to a network fork or instability. While currently the foundation likely coordinates everyone, as the network decentralizes, differing opinions could emerge (some might want to change a parameter, others not). A contentious hard fork could split the community and even the token (leading to two versions of MOVE on two chains). This scenario is not imminent but possible in the long term if governance disputes intensify.

Dependency on Ethereum: Movement’s security model relies on Ethereum for final settlement. This introduces a dependency: if Ethereum has issues (e.g., extremely high gas prices, network congestion, or an outage – albeit Ethereum doesn’t “outage” easily, but hypothetically), Movement could be affected. For example, if gas fees on Ethereum spike, posting state checkpoints becomes expensive or slow, potentially delaying Movement’s finality or making operations costly. In extreme cases, if Ethereum halted or reorganized deeply (very unlikely), Movement’s security assumptions would be shaken. So Movement inherits a bit of Ethereum’s risk profile (the flip side of borrowing its security).

Interoperability Risks: Movement aspires to connect multiple chains (through its shared sequencer and bridges). This complexity means it must handle cross-chain atomicity and consistency. There is risk of atomic swaps or cross-chain operations failing mid-way due to issues on one side, potentially causing user losses or stranded assets. Ensuring seamless operation across different environments is non-trivial.

Adoption & Ecosystem Risk: Movement requires not just technical success but also ecosystem adoption. Risk factors include: developers might find Move language challenging or prefer to build on a more established chain (like Ethereum or an existing Layer-2). If Movement doesn’t achieve critical mass of DApps, users might not find enough utility in the network, limiting demand for MOVE. Conversely, if a lot of development happens but user uptake is slow, many projects could stagnate. The foundation has funded some projects (as noted, around 12 accelerated projects), but those need to succeed to showcase Movement’s potential.

Governance Evolution Risk: As Movement transitions to more decentralized governance (MOVE holder voting), there is risk of governance attacks or apathy. If not enough holders participate, governance could be dominated by a small group (potentially the team or large investors), replicating centralization under the guise of decentralization. Or malicious actors could accumulate MOVE to influence votes detrimentally. Designing governance to avoid these pitfalls is a challenge. Until proven, there’s uncertainty whether on-chain governance will effectively steer the project or become a point of contention.

Key Infrastructure & Centralization Points: In early stages, some infrastructure might be centralized or rely on specific providers (for example, if most full nodes are run on certain cloud services, or if the block explorer and RPC endpoints are centrally hosted by Movement Labs). Outages or attacks on those services (say the official RPC endpoint goes down) could hamper network usability even if the core chain is running. Over-reliance on specific “choke points” early on is a risk until the network fully decentralizes its infrastructure.

I.5 Technology-Related Risks

The Movement Network employs novel and complex technology, which comes with inherent risks of bugs, vulnerabilities, or unforeseen issues:

Smart Contract Vulnerabilities: Movement's Move-based smart contracts are intended to be safer, but no language is perfect. There could be bugs in the core modules (like the Move standard library or the MOVE token implementation) that were not discovered yet. For example, earlier in the broader Move ecosystem, a critical DoS vulnerability was found in Aptos's mempool in 2022, requiring patches. This indicates that even well-designed Move systems can have flaws. If a vulnerability in Movement's core contracts (perhaps the bridge contract, or staking logic) were exploited, it could lead to serious consequences such as loss of funds (in a bridge hack scenario) or disruption of consensus (if staking logic is manipulated).

Consensus/Protocol Bugs: The consensus algorithm FFS is relatively new and possibly less battle-tested than, say, Bitcoin's or even some BFT implementations. There might be edge cases that cause consensus to stall or behave inconsistently. A bug in validator code could potentially allow a desynchronization where different parts of the network think different blocks are final. Although finality protocols are mathematically proven under assumptions, real implementations can deviate. Such a bug could cause a network halt or require a coordinated restart (with potential rollback).

Cryptographic Breakthrough Risks: Movement's security, like all modern blockchains, relies on cryptographic algorithms (e.g., Ed25519, SHA-3, etc.). A breakthrough in cryptography – for instance, a feasible quantum computer – could break these algorithms, compromising signatures and hashes. If quantum attacks became viable, an attacker could forge transactions or alter data on Movement (and Ethereum). While this is a broader industry risk, Movement would have to rapidly integrate post-quantum cryptography to mitigate it, which is non-trivial. Currently, these risks are theoretical, but over the longer horizon (years) they must be acknowledged.

Interoperability Tech Risks: The use of LayerZero and cross-chain communications introduces additional attack surfaces. For instance, if the oracle or relayer in LayerZero were compromised or colluded, false messages could be delivered (like telling Movement a transaction occurred on Ethereum when it didn't, or vice versa). LayerZero's design mitigates this by requiring both an oracle and relayer to collude to spoof messages, and ideally they're independent. But any weakness (e.g., a bug in LayerZero's smart contracts on either chain) could impact Movement's bridging. A failure in interoperability tech might result in stuck funds (if bridging halts), or exploits (if messages are tampered with).

Reliance on External Infrastructure: If the Movement ecosystem depends on certain key external services (for example, if for randomness it uses an external oracle, or if for certain computations it relies on external proofs), issues with those external pieces could cascade into Movement. Even reliance on Ethereum means any Ethereum-side bug affecting the Movement bridge contract would impact Movement.

Malicious Attacks and Security Exploits: Hackers constantly target blockchain networks. They might try DDoS attacks on Movement nodes or network (e.g., spamming the network with transactions to hinder normal operations – Movement must handle this gracefully via fees and mempool management). They could attempt to exploit any weak points in node software (buffer overflow in the client, etc.). The team's response capacity matters – how quickly can they issue patches and get validators to adopt them. During the mainnet beta, one focus was validating security measures ^[60]. But the resilience of the network in the wild is yet to be fully proven.

I.6 Mitigation Measures

The Movement team and community have taken or planned several steps to mitigate the above risks and strengthen the resilience of the project:

Security Audits: Movement's code has undergone professional security audits. In early 2024, MoveBit (a specialized Move ecosystem auditor) completed an audit of Movement's smart contracts, finding no critical issues and ensuring robust security. All reported findings (mostly low-level or informational) were addressed, indicating the core contract code (including token logic, staking, etc.) was thoroughly reviewed by experts. Ongoing, it is likely that additional audits by reputable firms (Trail of Bits, Halborn, CertiK, etc.) will be scheduled for major updates. The foundation has allocated resources for third-party security assessments to catch vulnerabilities before they impact the network.

Forensic Investigation and Governance Reforms: In response to the Rentech incident and governance failure, Movement Labs commissioned a third-party forensic audit/investigation to uncover exactly what went wrong in that market-making arrangement. This transparency move helps ensure accountability and learning from mistakes. The foundation severed ties with the problematic party and is implementing stricter oversight on token allocations. Additionally, they launched a \$38M USDT buyback program to stabilize the token price and restore confidence, demonstrating willingness to act in support of the market during crises. More structurally, the foundation is accelerating development of a decentralized governance module (Movement v2) where key decisions (like engaging market makers, or large token movements) will require on-chain approval by MOVE holders. By distributing governance rights and instituting conflict-of-interest safeguards, they aim to prevent a small group from having unchecked control, thus avoiding repeats of the Rentech scenario. Early tests of on-chain voting have reportedly shown good community participation, which bodes well for oversight going forward.

Transparency and Communication: The team has increased communications to keep the community informed. Regular updates via Messari and other channels highlight significant events (both good and bad). For example, details of token allocations (even previously undisclosed ones that were leaked) are now being openly discussed, and the foundation committed to improved transparency around any token movements or partnerships. The publication of this MiCA white paper itself is a transparency measure – voluntarily disclosing extensive information for the benefit of all stakeholders. The foundation also publishes technical documentation and open-source code, allowing the community to verify and contribute (Movement's GitHub is active [\[99\]](#)). This open approach helps catch issues faster (many eyes on the code) and builds trust.

Technical Safeguards: On the network side, measures are in place to ensure stability:

Rate limiting & anti-spam: The gas/fee mechanism and possibly additional rate limits prevent any single actor from overwhelming the network easily. There may be circuit-breakers such as halting certain operations if they exceed resource thresholds.

Monitoring & Incident Response: The core dev team monitors network health metrics (through dashboards, alerts for unusual validator behavior or performance drops). They have contingency plans for various scenarios – e.g., if consensus slows or some validators drop, they coordinate with the validator community on fixes or restarts. This quick response capability was likely practiced in testnets and is critical for minimizing downtime.

Validator incentives alignment: Although slashing is not implemented, validators are kept honest by the structure of incentives (they stand to gain more by behaving correctly and continuously, rather than by trying anything malicious and losing future rewards and delegations). Additionally, the community keeps a close eye – any validator suspected of misbehavior would lose reputation and delegations swiftly.

Gradual Decentralization: The foundation has likely kept an initial hand on the tiller (for instance, running some validators or closely vetting initial validators) to ensure a smooth launch. As the network proves stable, they will decentralize more control (bringing in more

independent validators, enabling on-chain governance for upgrades). This phased approach mitigated the risk of chaos at launch and allows the system to harden before fully open.

Community & Ecosystem Support: Movement proactively fosters a strong community that can help in risk mitigation. Over 800 builders and 840 contributors were engaged even before mainnet. A Move developer community (Move Collective) has been nurtured to share best practices and security tips for Move programming. Educational efforts mean more developers can spot potential issues. The foundation's grant programs ensure critical infrastructure (like additional block explorers, wallets, monitoring tools) are built, reducing single points of failure and providing redundancies.

In addition, Movement has joined industry initiatives (possibly alliances focusing on cross-chain security, etc.) to stay ahead of threats.

Insurance and Funds Safety: While not provided by the protocol itself, the ecosystem has seen emergence of insurance solutions to help users hedge risks. For example, decentralized insurance platforms (maybe InsurAce or others) might offer policies covering smart contract hacks on Movement, as they do for other chains. The foundation has also set aside reserves (the buyback fund could double as an emergency fund) to address unforeseen crises. Though not a formal insurance, the presence of a significant treasury allows the foundation to potentially compensate users or stabilize the system if a catastrophe occurs (as seen with the buyback injection to support liquidity).

J. PART J - INFORMATION ON THE SUSTAINABILITY INDICATORS IN RELATION TO ADVERSE IMPACT ON THE CLIMATE AND OTHER ENVIRONMENT-RELATED ADVERSE IMPACTS

Adverse impacts on climate and other environment-related adverse impacts.

J.1 Information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

The MOVE Protocol operates on the Ethereum blockchain, which since its transition to proof-of-stake (PoS) no longer relies on energy-intensive mining. PoS models are generally considered less resource-demanding than proof-of-work systems, as they depend on validators staking assets rather than expending large amounts of computational power. That said, this does not imply the absence of environmental impact. The actual energy use depends on factors such as the number of validators, the type of hardware deployed, and the geographic distribution of nodes. MOVE itself does not operate its own consensus network but is secured through Ethereum's existing validator infrastructure. As such, any environmental footprint associated with MOVE is tied to Ethereum's overall PoS operations, which may still vary depending on adoption levels, validator practices, and network activity.

General information	
S.1 Name <i>Name reported in field A.1</i>	LCX
S.2 Relevant legal entity identifier Identifier referred to in field A.2	529900SN07Z6RTX8R418

S.3 Name of the crypto-asset Name of the crypto-asset, as reported in field D.2	MOVE
S.4 Consensus Mechanism The consensus mechanism, as reported in field H.4	The crypto-asset's Proof-of-Stake (PoS) consensus mechanism, introduced with The Merge in 2022, replaces mining with validator staking. Validators must stake at least 32 ETH every block a validator is randomly chosen to propose the next block. Once proposed the other validators verify the blocks integrity. The network operates on a slot and epoch system, where a new block is proposed every 12 seconds, and finalization occurs after two epochs (~12.8 minutes) using Casper-FFG. The Beacon Chain coordinates validators, while the fork-choice rule (LMD-GHOST) ensures the chain follows the heaviest accumulated validator votes. Validators earn rewards for proposing and verifying blocks, but face slashing for malicious behavior or inactivity. PoS aims to improve energy efficiency, security, and scalability, with future upgrades like Proto-Danksharding enhancing transaction efficiency.
S.5 Incentive Mechanisms and Applicable Fees Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5	The crypto-asset's PoS system secures transactions through validator incentives and economic penalties. Validators stake at least 32 ETH and earn rewards for proposing blocks, attesting to valid ones, and participating in sync committees. Rewards are paid in newly issued ETH and transaction fees. Under EIP-1559, transaction fees consist of a base fee, which is burned to reduce supply, and an optional priority fee (tip) paid to validators. Validators face slashing if they act maliciously and incur penalties for inactivity. This system aims to increase security by aligning incentives while making the crypto-asset's fee structure more predictable and deflationary during high network activity.
S.6 Beginning of the period to which the disclosure relates	2024-05-18
S.7 End of the period to which the disclosure relates	2025-05-18
Mandatory key indicator on energy consumption	
S.8 Energy consumption Total amount of energy used for the validation of transactions and the maintenance of the integrity of the	1409.68241 kWh per year

distributed ledger of transactions, expressed per calendar year	
Sources and methodologies	
S.9 Energy consumption sources and Methodologies Sources and methodologies used in relation to the information reported in field S.8	For the calculation of energy consumptions, the so called "bottom-up" approach is being used. The nodes are considered to be the central factor for the energy consumption of the network. These assumptions are made on the basis of empirical findings through the use of public information sites, open-source crawlers and crawlers developed in-house. The main determinants for estimating the hardware used within the network are the requirements for operating the client software. The energy consumption of the hardware devices was measured in certified test laboratories. When calculating the energy consumption, we used - if available - the Functionally Fungible Group Digital Token Identifier (FFG DTI) to determine all implementations of the asset of question in scope and we update the mappings regularly, based on data of the Digital Token Identifier Foundation.

J.2 Supplementary information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

Supplementary key indicators on energy and GHG emissions	
S.10 Renewable energy consumption Share of energy used generated from renewable sources, expressed as a percentage of the total amount of energy used per calendar year, for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions.	14.770208242%
S.11 Energy intensity Average amount of energy used per validated transaction	0.00000 kWh
S.12 Scope 1 DLT GHG emissions – Controlled Scope 1 GHG emissions per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	0.00 tCO ₂ e per year
S.13 Scope 2 DLT GHG emissions – Purchased Scope 2 GHG emissions, expressed in tCO ₂ e per calendar year for the validation of transactions and the	1873.14310 tCO ₂ e/a

maintenance of the integrity of the distributed ledger of transactions	
S.14 GHG intensity Average GHG emissions (scope 1 and scope 2) per validated transaction	0.00000 kgCO2e per transaction
Sources and methodologies	
S.15 Key energy sources and methodologies Sources and methodologies used in relation to the information reported in fields S.10 and S.11	To determine the proportion of renewable energy usage, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from the European Environment Agency (EEA) and thus determined.
S.16 Key GHG sources and methodologies Sources and methodologies used in relation to the information reported in fields S.12, S.13 and S.14	To determine the GHG Emissions, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from the European Environment Agency (EEA) and thus determined.