MiCA White Paper

METAPLEX (MPLX)

Version 1.1
Nov 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).

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).

00 TABLE OF CONTENT

01 DATE OF NOTIFICATION

2025-12-17

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 MPLX token is a fungible, digital asset implemented on the Solana blockchain and forms the foundational coordination mechanism of the Metaplex Protocol. MPLX is used primarily to support decentralized governance through the Metaplex DAO, enabling token holders to vote on protocol upgrades, treasury allocations, and ecosystem initiatives. It also underpins protocol-level incentive mechanisms, such as staking for governance participation or rewards for contributors and validators supporting the Metaplex ecosystem. While MPLX may be referenced in DAO-approved programs to enable participation in specific initiatives or access to community-driven features, it does not grant holders any ownership interest, legal claim, dividend rights, or guaranteed access to goods or services. MPLX is not backed by any underlying asset, pegged to a reference value, or redeemable at par. Its supply, transfer, and governance interactions are defined by smart contracts deployed on Solana, and its market value is determined entirely by supply and demand conditions within the ecosystem. Accordingly, under Regulation (EU) 2023/1114, MPLX qualifies as an “Other Crypto-Asset” under Title II of MiCAR, reflecting its role as a decentralized governance and coordination token rather than as an asset-referenced, e-money, or utility token.

09 Not applicable

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

This document does not relate to a new public offering of MPLX t okens. The MPLX token has already been created, issued, and widely distributed through its integration. Rather than serving as an issuance prospectus, this whitepaper is prepared in the context of the admission of MPLX to trading on a regulated crypto-asset trading platform operated by LCX AG.

LCX AG, a registered exchange and custodian based in Liechtenstein, facilitates the listing and trading of MPLX in accordance with the regulatory obligations defined under the Markets in Crypto-Assets Regulation (MiCA). LCX is not the issuer or sponsor of the MPLX token and does not exercise control over its supply, governance, or token economics. The responsibility of LCX is limited to ensuring that the token is admitted to trading on its platform in a manner that is compliant with MiCA’s provisions on transparency, investor protection, and market integrity.

This whitepaper is published under Article 6(1) of MiCA to ensure that investors and market participants have access to standardized, fair, and clear information about the features, risks, and rights associated with the MPLX token. As MPLX is already in circulation and traded across both centralized and decentralized platforms, its listing on LCX does not involve any fundraising, token sale, or initial offering event. No MPLX tokens are being issued or distributed as part of the admission process.

The trading of MPLX on LCX's regulated venue occurs under open market conditions. Prices are determined by supply and demand dynamics among market participants, without any pre-fixed valuation or minimum subscription thresholds. LCX supports trading pairs such as MPLX /EUR to enhance liquidity and accessibility for users operating in fiat and crypto markets/

Total offer amount	Not applicable
Total number of tokens to be offered to the public	Not applicable
Subscription period	Not applicable
Minimum and maximum subscription amount	Not applicable
Issue price	Not applicable
Subscription fees (if any)	Not applicable
Target holders of tokens	Not applicable
Description of offer phases	Not applicable
CASP responsible for placing the token (if any)	Not applicable
Form of placement	Not applicable
Admission to trading	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 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.

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

Metaplex Foundation

B.3 Legal Form

Non Profit Foundation company

B.4 Registered Address

23 Lime Tree Bay Avenue, P.O. Box 10176, Grand Cayman, KY1-1002, Cayman Islands

B.5 Head Office

23 Lime Tree Bay Avenue, P.O. Box 10176, Grand Cayman, KY1-1002, Cayman Islands

B.6 Registration Date

Not available publicly

B.7 Legal Entity Identifier

Not available

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

The foundation's leadership is publicly represented by its directors and key officers. Notably:

- Stephen Hess – (Global, not publicly listed address) – Director (Chairman) of the Metaplex Foundation. Mr. Hess co-founded Metaplex and leads the foundation's strategic direction . (Stephen Hess is the CEO of Metaplex Studios and serves as Chairman of the Metaplex Foundation , bringing experience from Solana Labs to drive Metaplex's growth.)

B.11 Business Activity

The Metaplex Foundation is a non-profit organization dedicated to supporting and growing the Metaplex protocol . Its mission is to build the digital asset economy by empowering developers and creators with comprehensive tools to create decentralized applications and digital assets . Key activities include:

Developing and maintaining protocol standards: The Foundation stewards the Metaplex Digital Asset Standard, which defines how NFTs and other digital assets are structured on Solana, and oversees the Metaplex Program Library (MPL) – a set of on-chain programs (smart contracts) for minting, selling, and managing those assets. This involves continual innovation at the standards layer for the benefit of creators, collectors, and developers.

Core infrastructure and tooling: It supports the Metaplex Developer Platform (SDKs, CLI tools, and documentation) to simplify building on Solana and the Metaplex programs. By providing open-source, audited smart contract libraries and developer resources, the Foundation lowers barriers for projects in the ecosystem .

Ecosystem growth and grants: The Foundation runs grant programs and other funding initiatives to foster projects and startups using Metaplex. It allocates resources (including some MPLX tokens and proceeds) to encourage development of new features, integrations (e.g. wallets, marketplaces like Phantom, Magic Eden), and community-driven improvements within the Metaplex ecosystem.

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 preparing this MiCA-compliant whitepaper for MPLX (MPLX) to enhance transparency, regulatory clarity, and investor confidence. While MPLX has 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 MPLX 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.

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

Metaplex

D.2 Crypto-Assets Name

Metaplex

D.3 Abbreviation

MPLX

D.4 Crypto-Asset Project Description

Metaplex is a decentralized protocol developed on the Solana blockchain that facilitates the scalable creation, management, and interaction with digital assets—particularly non-fungible tokens (NFTs). Since its launch in 2021, Metaplex has become the primary infrastructure for NFT issuance on Solana, supporting a large majority of NFT activity on the network. The protocol standardizes digital asset behavior through the Digital Asset Standard (DAS), which defines how metadata, royalties, and asset interactions are handled across applications. These standards are implemented via the Metaplex Program Library (MPL), a collection of audited, on-chain smart contracts including key components such as Token Metadata, Candy Machine, Auction House, Token Vault, and compressed NFT solutions like Bubblegum. Developers interact with the Metaplex protocol using a comprehensive developer platform that includes SDKs, APIs, and command-line tools, promoting widespread adoption and integration across Solana-based applications. The MPLX token is the native governance token of the protocol and enables decentralized decision-making through the Metaplex DAO. Holders of MPLX may participate in governance processes by voting on upgrades, resource allocation, and ecosystem development decisions. While the token may be referenced in community-driven initiatives or coordination mechanisms, it does not entitle holders to any profit-sharing, revenue claims, or enforceable rights to a product or service. MPLX does not function as a utility token within the meaning of Article 3(1)(8) of MiCA and is instead classified under Title II as an “Other Crypto-Asset,” as it does not reference underlying assets or provide monetary redemption rights. Its core role is in protocol governance and coordination within the decentralized Metaplex ecosystem.

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

The MPLX 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
Stephen Hess	Global	Co-founder & Director
Metaplex Core Developers	Global	Developement
Metaplex DAO (MPLX Holders)	Global	Community Participants

Solana Network Validators	Global	Validators and Node operators

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 filing this MiCA-compliant white paper for MPLX to provide full disclosure under the new regulatory framework, MPLX is classified as “other crypto-asset” under MICA and the aim is to boost investor confidence and clarity regarding MPLX ’s features, risks, and legal status. By aligning with MiCA’s high disclosure standards, LCX strengthens its position as a regulated exchange and facilitates broader market access for MPLX within the European Economic Area .This initiative is expected to remove uncertainty for institutional participants and comply with evolving EU rules, thereby supporting broader adoption of MPLX and integration into regulated financial ecosystems . In summary, the admission is pursued to list MPLX in a fully compliant manner, allowing European users to trade MPLX on a transparent, regulated venue with all necessary information provided upfront.

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 early 2025, the total fixed supply of MPLX is 1,000,000,000 tokens, with approximately 590 million MPLX (59% of the total supply) currently in circulation. The remaining 410 million tokens are subject to various vesting and lock-up schedules, held by stakeholders such as the Metaplex Foundation, DAO treasury, strategic partners, and founding contributors. MPLX was fully minted at genesis in 2022, with no additional issuance mechanisms. Initial distribution included allocations to early community participants (~21.9%), the Metaplex DAO Treasury (16%), the Foundation (~20.3%), strategic partners (~10.2%), founding developers and entities (such as Everstake and Metaplex Studios), community airdrops (~5.4%), founding advisors (~3.3%), and launch collaborators (~3.1%). All allocations are transparently tracked and

governed either through internal controls or on-chain governance mechanisms, with scheduled releases ensuring long-term alignment with the Metaplex ecosystem. The token's circulating supply may increase gradually as locked tokens vest according to predefined timelines, but the total supply remains capped, and no minting function exists.

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

MPLX /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

MPLX is widely traded on numerous cryptocurrency exchanges globally. MPLX 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 MPLX trading (pair MPLX /EUR). To access MPLX 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

Not applicable –As such, MPLX itself is not governed by a single national legal framework. The applicable laws depend on the jurisdictions where it is traded or utilized. However, in relation to the admission to trading of MPLX on LCX Exchange, the laws of Liechtenstein apply in accordance with Regulation (EU) 2023/1114 (MiCA) and other applicable EU financial regulations.

E.40 Competent Court

In case of disputes related to services provided by LCX, the competent court is: The Courts of Liechtenstein, with jurisdiction in accordance with Liechtenstein law and applicable EU regulations

F. PART F - INFORMATION ABOUT THE CRYPTO-ASSETS

F.1 Crypto-Asset Type

Other Crypto-Asset

F.2 Crypto-Asset Functionality

The MPLX token functions as the governance and coordination asset for the decentralized Metaplex protocol on the Solana blockchain. Its primary role is to enable community-driven decision-making via the Metaplex DAO, where MPLX holders can propose and vote on protocol-level changes such as upgrades to on-chain programs, adjustments to governance parameters, and the allocation of ecosystem resources. This governance functionality is encoded in smart contracts and implemented through on-chain and off-chain voting systems, empowering token holders to influence the evolution of the protocol in a decentralized manner

Beyond governance, MPLX serves as an alignment mechanism within the Metaplex ecosystem. By holding MPLX, contributors such as developers, creators, and ecosystem participants demonstrate a vested interest in the long-term health and adoption of the protocol. In some cases, the DAO may vote to enable token-gated community initiatives—such as access to exclusive NFT drops or experimental incentive programs—although these features are optional, governed transparently, and not central to the token's classification.

MPLX does not confer any rights to ownership, dividends, profit participation, or redemption against the issuer. It also does not function as a representation of a specific product or service entitlement, nor was it issued as a form of prepayment. Any features linked to token holdings are determined by community governance and are not guaranteed or contractually enforceable. Therefore, MPLX does not meet the criteria of a utility token under Article 3(1)(8) of Regulation (EU) 2023/1114 and is instead appropriately classified under Title II of MiCA as an "Other Crypto-Asset." This classification reflects its core design as a decentralized governance and coordination instrument for an open-source blockchain protocol.

F.3 Planned Application of Functionalities

MPLX is already active in its intended technical and governance functions within the Metaplex protocol, and no additional core functionalities are planned at this time. The token will continue to operate as: (i) the governance asset for community voting on protocol upgrades, ecosystem funding, and DAO-led initiatives; (ii) a coordination mechanism for community-based participation, such as token-gated discussions or experimental content access, when approved by governance; and (iii) a standard SPL-compatible digital asset that can be optionally integrated by third-party Solana applications or platforms. There are no commitments to expand MPLX's function beyond these roles, which already encompass its purpose in supporting decentralized governance and ecosystem alignment. Any future considerations—such as introducing staking mechanisms, reward structures, or new governance modules—would be subject to transparent community proposal and on-chain vote. These are prospective developments and not inherent to MPLX's design at present. Overall, MPLX's role is stable, with planned usage continuing to center around decentralized coordination and protocol governance within the Metaplex ecosystem.

F.4 Type of white paper

OTHR

F.5 The type of submission

NEWT

F.6 Crypto-Asset Characteristics

The MPLX token is a fungible digital asset issued on the Solana blockchain, designed in accordance with the SPL (Solana Program Library) token standard. It is divisible up to nine decimal places and transferable between compatible Solana wallets. MPLX is not backed by any underlying physical asset, nor is it pegged to a currency or redeemable for a good or service from the issuer. Its functionality is embedded within the technical operations of the Metaplex protocol, where it serves as the token used for protocol governance and certain ecosystem coordination mechanisms, as determined by community governance.

MPLX does not provide ownership rights, profit-sharing entitlements, or enforceable claims against the issuer or any third party. It does not grant access to specific services or products under a commercial agreement, and it is not structured as a voucher or prepaid instrument. The token's value is determined by market dynamics and its role in governance participation, rather than consumption of a product or redemption mechanism.

The supply of MPLX is fixed at 1,000,000,000 tokens, minted at genesis with no further minting allowed. Distribution is governed by pre-set allocations, including treasury, development, and community initiatives, with many tokens subject to vesting or governance oversight. Transactions involving MPLX rely on the Solana network's consensus mechanism (Proof-of-History combined with Proof-of-Stake), and token operations—such as transfers or governance-related actions—are recorded immutably on-chain.

In line with MiCA's classification, MPLX does not fall under the categories of electronic money tokens, asset-referenced tokens, or utility tokens. It is properly designated as an "Other Crypto-Asset," functioning primarily as a governance and coordination token within a decentralized blockchain-based protocol without implying consumptive rights or issuer-backed utility.

F.7 Commercial name or trading name

MPLX

F.8 Website of the issuer

www.metaplex.com

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

2025-12-17

F.10 Publication date

2025-12-17

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

2S9ZH0BJL

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

2FX0H8T88

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

Correspondingly, MPLX holders have no formal obligations – holding the token doesn't obligate one to participate in governance or to contribute to the project (though participation is encouraged). There is no lock-up unless self-imposed (except for those who received tokens with vesting, who must abide by those schedules). Holders are, however, responsible for abiding by applicable laws (e.g., not using MPLX for illicit activities) and should secure their tokens (since losing private keys means losing access to the token). In essence, MPLX provides decentralized network participation rights and nothing more: no guarantee of monetary value, no redemption rights, and no legal claims on any entity's resources.

G.2 Exercise of Rights and Obligation

Since MPLX does not grant traditional contractual rights, the "exercise" of rights is unlike that of a share or bond. The rights that do exist (governance and utility uses) are exercised on-chain through token holder actions. For example, to exercise governance rights, an MPLX holder uses their wallet to vote on a proposal in the Metaplex DAO – this involves signing a transaction cryptographically with their private key to cast a vote proportional to their token holdings. Similarly, if a holder wants to access a token-gated feature (say, claim an NFT drop reserved for MPLX holders), they exercise that by proving ownership of the required amount of MPLX (again via blockchain transaction).

G.3 Conditions for Modifications of Rights and Obligations

There are no formal "rights" in the legal sense, but any changes to how MPLX can be used (its governance power, etc.) would be effected through the Metaplex protocol's upgrade and governance process. For instance, if the community decided to introduce a new utility for MPLX (say staking MPLX for enhanced voting weight or new rewards), that would require a DAO proposal and vote, and then implementation via a smart contract update or new program. Similarly, if a technical change altered the voting mechanism (e.g. introducing quadratic voting or adjusting quorum thresholds), it would be done by community consensus through governance proposals.

G.4 Future Public Offer

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

The total supply of MPLX is capped at 1,000,000,000 tokens, with no mechanisms in place for minting additional tokens. The token contract does not permit algorithmic inflation, discretionary supply increases, or ongoing issuance beyond the initial allocation established at launch. Any adjustments to the circulating supply arise solely through pre-defined token unlock schedules or governance-approved market operations, rather than issuer-driven actions.

A significant portion of the initial allocation was locked and subject to vesting schedules for stakeholders such as team members, advisors, and strategic partners. These vesting arrangements, typically ranging from one to three years, gradually transition tokens from non-circulating to circulating status based on time-based rules. The schedules were established at launch and disclosed to the public, providing predictability to the release of tokens. Market participants can track these unlocks through public blockchain data and community dashboards.

In addition to vesting-related increases in supply, a token repurchase program was introduced through DAO governance. Under the current policy, a portion of protocol revenues (e.g., from NFT platform usage fees) is used to acquire MPLX from the open market. These purchased tokens are transferred to the DAO treasury, reducing the circulating supply. While these tokens are not permanently burned, they remain dormant unless reallocated through community governance. This buyback mechanism operates under a community-approved framework and may evolve over time through governance proposals.

Importantly, neither the Foundation nor any central entity retains unilateral authority to mint or burn tokens. Any changes to token distribution, including treasury actions or potential deflationary adjustments, are subject to transparent governance processes and on-chain recordkeeping.

This capped supply model, combined with transparent vesting and community-led adjustments, ensures that MPLX follows a predictable and rule-based distribution structure. All supply changes can be independently verified through blockchain explorers, supporting transparency and aligning with the requirements for Other Crypto-Assets under MiCA.

G.13 Supply Adjustment Mechanisms

The MPLX token follows a fixed supply model, with the entire supply of 1,000,000,000 tokens created at genesis. There are no active or embedded mechanisms to increase this total supply, and no algorithmic or issuer-controlled inflationary processes exist within the token contract. As such, MPLX's supply adjustment mechanisms pertain solely to the circulating supply, which may vary over time due to predetermined or governance-approved actions.

Vesting Schedules: A significant portion of the MPLX supply was allocated to early contributors, partners, development teams, and other ecosystem stakeholders. These allocations are subject to predefined vesting and lock-up schedules, which release tokens gradually into circulation over periods ranging from 12 to 36 months. These schedules were established at the time of token issuance and are either implemented through smart contracts or governed by multisig-controlled wallets, ensuring predictability and transparency.

DAO-Governed Market Operations: The Metaplex DAO has approved a buyback mechanism whereby a portion of protocol-generated revenue is used to purchase MPLX tokens from the open market. These tokens are then transferred to the DAO treasury, reducing the circulating supply. While these tokens are not burned, they are effectively removed from public circulation unless explicitly redeployed through a governance proposal. This approach is governed by community vote and may evolve, remain in place, or be discontinued depending on DAO decisions.

No Minting or Automatic Burning: The MPLX token contract does not include a mint function, and the authority to increase supply is either non-existent or irrevocably restricted. There is also no automated burn logic built into the contract. Any future decision to reduce the total supply (for example, through a burn of treasury-held tokens) would require explicit community governance approval and on-chain execution, and is not currently implemented.

In summary, MPLX's supply adjustment mechanisms are transparent, rules-based, and governance-driven, with no unilateral control by any issuer or central party. These mechanisms function within the scope of a decentralized protocol and do not imply redemption rights, asset-backing, or fixed-value guarantees. As such, MPLX remains appropriately classified under MiCA as an "Other Crypto-Asset" and not as a utility token, e-money token, or asset-referenced token.

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

Not applicable – As such, MPLX itself is not governed by a single national legal framework. The applicable laws depend on the jurisdictions where it is traded or utilized. However, in relation to the admission to trading of MPLX on LCX Exchange, the laws of Liechtenstein apply in accordance with Regulation (EU) 2023/1114 (MiCA) and other applicable EU financial regulations.

G.19 Competent Court

Not applicable - As MPLX (MPLX) is a decentralized, open-source crypto-asset with no central issuer or governing entity, it does not fall under the jurisdiction of any specific legal framework. In case of disputes related to services provided by LCX, the competent court is: The Courts of Liechtenstein, with jurisdiction in accordance with Liechtenstein law and applicable EU regulations.

H. PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY

H.1 Distributed ledger technology

The MPLX token and Metaplex programs operate on Solana, a public, permissionless distributed ledger known for high performance. Solana's blockchain uses a unique design that differs from traditional sequential blockchains by incorporating a cryptographic time-keeping

technique called Proof-of-History (PoH). PoH serves as a verifiable timestamp, ordering events before they enter the consensus process [obj] [obj]. This allows Solana to reduce the workload in reaching consensus on transaction ordering. The network's consensus is achieved through a modified Proof-of-Stake (PoS) protocol called Tower BFT, which leverages those PoH timestamps. Validator nodes stake Solana's native token (SOL) to participate in validating transactions and rotating as leaders that produce blocks. Blocks on Solana are produced very frequently (every ~400ms) [obj] [obj], and thanks to PoH, validators can reliably and quickly agree on the order of transactions with minimal communication overhead. Finality on Solana is typically reached in under 1 second per block, meaning a transaction (like an MPLX transfer) is confirmed and irreversible almost immediately after it's submitted.

MPLX Whitepaper: MPLX whitepaper

Public block explorer: https://solscan.io

MPLX Main repository: https://github.com/metaplex-foundation/mpl-token-metadata

MPLX Developer portal: https://developers.metaplex.com/

H.2 Protocols and Technical Standards

Metaplex and MPLX utilize several key protocols and standards within the Solana ecosystem:

SPL Token Standard: MPLX is issued under the SPL Token Program (Solana's standard program for fungible tokens, comparable to ERC-20). This standard defines how tokens are created, transferred, and managed on Solana. By adhering to SPL, MPLX can be used seamlessly with Solana wallets, exchanges, and DeFi protocols. The SPL standard includes features like optional freezing of tokens by the mint authority (typically renounced for decentralized tokens like MPLX), setting a decimal precision (MPLX has 6 decimals), and managing token accounts. The program ID for the SPL Token Program on Solana mainnet is TokenkegQfeZyiNwAJbNbGKPFXCWuBvf9Ss623VQ5DA. All MPLX transactions (transfers) are essentially instructions to this program to debit one account and credit another. This standard ensures that MPLX's behavior is consistent and secure, as the SPL Token Program is well-tested and audited.

Metaplex Programs (Token Metadata, Auction House, etc.): The Metaplex protocol introduces additional standards on top of base tokens. Notably, the Token Metadata program (program ID metaqbxxUerdq28cj1RbAWkYQm3ybzjb6a8bt518x1s) is part of Metaplex's library – it defines how NFTs and tokens can have off-chain or on-chain metadata like name, symbol, URI, and it supports things like update authorities for NFTs. While MPLX as a fungible token doesn't use the metadata program extensively (beyond having a name and symbol on chain), the existence of this program is part of the technical environment. Auction House is a trust-minimized on-chain marketplace program for NFTs that uses SOL or other SPL tokens for bids – potentially, MPLX could be used within such protocols if configured (e.g., one could imagine an auction where bids are in MPLX, though usually SOL or stablecoins are used). These Metaplex programs are built to Solana program standards (written in Rust and compiled to BPF bytecode). They use the CPI (Cross-Program Invocation) mechanism of Solana to interact – meaning, one program can call into another securely. For instance, the Metaplex governance program can call the system program or token program as needed during voting or treasury operations. All these interactions follow Solana's runtime rules (like all invoked programs in a transaction must be specified upfront).

Consensus Protocol (Tower BFT as per Solana): From Metaplex's perspective, it just relies on Solana's consensus. But to mention technical standards: Solana's consensus follows Practical Byzantine Fault Tolerance (pBFT) principles, with modifications to integrate PoH. The leader

schedule is predetermined each epoch (roughly 2 days) based on stake weight – validators are assigned slots to produce blocks in a pseudorandom but stake-weighted manner [obj] [obj]. If a validator (leader) fails to produce a block in their slot, the next slot's leader takes over and that slot simply has no block (thus no transactions lost, just a gap). Votes from validators have a lockout mechanism (once you vote on a block, you implicitly vote on all its ancestors and you can't vote on a competing fork without breaking the lock and potentially being penalized in the future) [obj] [obj]. Finality is reached when a supermajority of stake has voted on the same sequence of blocks, at which point those votes' lockouts extend beyond the current fork and the block is rooted (finalized) [obj] [obj]. These technical standards in consensus ensure that forks are resolved quickly and irreversibly. This is relevant to MPLX holders because it means once their transaction (say a vote or transfer) is finalized, it's permanent and will not be reversed under normal operation – giving confidence in the ledger's integrity.

Transaction & Instruction Standards: Solana transactions can contain multiple instructions, possibly to different programs. The Metaplex programs follow standard patterns for instructions – e.g., the instruction to mint an NFT includes accounts for payer, mint, metadata account, etc., with specific serialization format. These are documented in Metaplex's developer documentation, aligning with the convention that each instruction is a structured data blob that the program knows how to parse. By standardizing instructions, it's easier for third-party developers to integrate (like Phantom wallet can recognize a Metaplex NFT mint instruction and display it nicely to users). For MPLX, a simple transfer uses the SPL Token Program's TransferChecked instruction, which includes amount and decimals – a standard that ensures safe transfers (checking that the source has enough balance, etc.).

H.3 Technology Used

The implementation of MPLX and Metaplex leverages various technologies and infrastructure components:

Programming Languages & Frameworks: Metaplex smart contracts are written in Rust, which is Solana's primary on-chain language, known for memory safety and performance. They compile to Berkeley Packet Filter (BPF) bytecode which runs on Solana validators. Metaplex also provides SDKs in TypeScript/JavaScript for front-end and integration (for dApp developers to easily call Metaplex programs). Off-chain, the Metaplex ecosystem uses typical web technologies (Node.js, etc.) for tools like the Candy Machine CLI.

Cryptographic Tools: As noted, Ed25519 elliptic curve is used for signatures. Every MPLX holder's public address corresponds to an Ed25519 public key, and transactions are signed with the corresponding private key. For hashing (PoH and general hashing needs in programs), Solana uses SHA-256. PoH in particular is a mechanism where a leader validator computes SHA-256 in a sequence; the hash output is included in blocks as a proof of elapsed time. This is a novel use of a cryptographic hash in consensus.

Validator Hardware and Optimization: Solana validators typically run on robust hardware – many run on high-performance servers with 128+ GB RAM, multi-core CPUs, NVMe SSDs, and GPU acceleration. The MVNO (memory-mapped virtual addressing) design of Solana's accounts database (nicknamed Cloudbreak) allows horizontal scaling of accounts across SSDs [obj] [obj]. GPUs are used by validators to accelerate signature verification (the ed25519_verify function can be parallelized on GPU) [obj] [obj], as well as to help with erasure coding (used in block propagation via Turbine). This means the network can handle many transactions simultaneously. From MPLX's perspective, this tech ensures that even if thousands of MPLX holders submitted votes or transfers at the same time, the network could process them promptly. There's essentially no practical throughput limitation at the MPLX scale because Solana's capacity (tested at over 50k TPS in some instances) far exceeds typical MPLX usage.

Network Communication: Solana primarily uses the UDP protocol for validator-to-validator communication because of its low latency (no built-in handshakes like TCP). To ensure reliability over UDP, Solana implements its own data propagation strategy – Turbine, which breaks data into smaller pieces and transmits them across the network in a balanced way, and Forward Error Correction (erasure coding) to recover missing pieces [obj] [obj]. Solana is also adopting QUIC (built on UDP with congestion control) for improved reliability against packet loss (QUIC integration is part of ongoing upgrades to mitigate past outage causes) [obj] [obj]. For MPLX users, this technical detail is mostly invisible, but it contributes to the network's throughput and responsiveness – e.g., during a high-demand NFT mint (which might involve MPLX if one day MPLX is needed to mint something), QUIC helps handle the load without losing critical packets.

Data Storage: Solana's ledger is large (many millions of transactions). Arweave or other decentralized storage might be referenced for off-chain NFT metadata, but MPLX's data (balances etc.) is stored on-chain. Historical ledger data is offloaded to Archiver nodes in Solana's design – these are not currently heavily used, but the idea is that a distributed set of nodes hold pieces of historical blocks, ensuring that older ledger data is available without all validators storing it. For now, many RPC nodes also keep full ledgers, which are also used by explorers to query historical MPLX transactions.

H.4 Consensus Mechanism

In essence, Solana's consensus mechanism achieves a balance: it's fast and efficient thanks to PoH and Tower's reduced communication, yet it maintains safety with BFT guarantees. For Metaplex, having such a fast consensus means things like real-time bidding in auctions, instant NFT mint confirmations, and rapid DAO voting are all possible, making the user experience akin to Web2 in speed. It's worth noting that Solana's design prioritizes performance, which does come with high hardware requirements that have been a topic of debate (see Risks I.5 about centralization concerns). However, the fundamental consensus is secure as long as enough independent validators are online. As of this writing, Solana has experienced a few outages in its history (due to bugs or spam overwhelming nodes, not consensus failure per se), and each time the community and core devs issued upgrades to fix issues (e.g., the QUIC integration to handle spam better).

For MPLX token holders, the underlying consensus means they can trust that the blockchain won't fork and create "duplicate" MPLX or anything of that sort under normal operation. All token balances and changes are singular and authoritative on the main chain. Solana's consensus also implies that finality is quick, so if someone transfers MPLX to another or casts a vote, they can be confident in seconds that it's done.

In summary: Solana's PoS+PoH consensus provides sub-second block finality with tolerance up to 1/3 Byzantine nodes, using a fixed leader schedule and PoH to minimize network overhead. Validators vote on blocks using Tower BFT with increasing lockouts, making forks short-lived and finalizing blocks deterministically [obj] [obj]. This innovative mechanism underpins the reliability and speed of every action MPLX holders take on-chain.

H.5 Incentive Mechanisms and Applicable Fees

Solana's economic design (which indirectly affects MPLX usage) is focused on incentivizing validators and keeping transaction fees low for users. Key points include:

Validator Staking Rewards: Validators in Solana secure the network by staking SOL (the native coin). They are incentivized via inflationary SOL rewards. As of 2025, Solana's protocol has an annual inflation rate of ~4.5%, decreasing gradually each year towards a long-term rate of 1.5% [obj] [obj]. New SOL tokens are emitted to reward validators for voting on and confirming blocks. These rewards are split between the validator and those who delegated stake to it.

Typically, validators charge a commission (often 5-10%) on the rewards earned by the stake delegated to them [obj] [obj]. This ensures validators have income, and delegators still gain net yield. These staking incentives encourage a robust set of validators to participate, which in turn secures all tokens on Solana (including MPLX). Note: MPLX itself is not used for staking; only SOL is. MPLX holders do not earn staking rewards from MPLX (unless they manually stake their SOL holdings). So the incentive mechanism for MPLX is more aligned with governance influence and token appreciation rather than protocol rewards.

Transaction Fees: Solana charges a small fee in SOL for each transaction. As mentioned, it's typically extremely low (on the order of $0.00025 on average). Every transaction fee is split such that 50% of the fee is burned (destroyed) and 50% is given to the validator who processed the transaction [obj] [obj]. This burning introduces a deflationary element to counter inflation: as network usage increases, more SOL gets burned, potentially offsetting new issuance. In high usage scenarios, if fee burns became significant, net inflation could drop or even go negative (if burn > issuance). Currently, fee burning is minor relative to issuance because fees are low, but it's conceptually important. For MPLX users: whenever they send an MPLX transaction or cast a vote, they pay a tiny SOL fee, half of which is burned. This mechanism ensures spam is disincentivized and validators still get compensated (through the other half of the fee plus block rewards). For example, if a user does 100 MPLX transfers, perhaps 0.0005 SOL might be burned in total – negligible at individual scale but significant network-wide.

No Direct MPLX Incentives: MPLX itself does not have a built-in "reward" mechanism (e.g. it's not a yield-bearing token). Its value proposition to holders is largely governance power and the expectation that if Metaplex usage grows (more NFTs, more projects), demand for MPLX as a governance token will grow, potentially increasing its market value. Additionally, MPLX holders might benefit indirectly from decisions like the buyback program: As the DAO spends SOL to buy MPLX off the market using protocol fees, that creates upward pressure on MPLX's price over time, effectively returning value to MPLX holders in a way analogous to dividends or buybacks in traditional finance (though not guaranteed or evenly distributed). For instance, in July 2025, ~$2.3M of SOL fees were used to repurchase MPLX [obj], which presumably had a positive impact on MPLX's price absent other factors. This aligns token holder incentives with platform success: if Metaplex generates more fees (from NFT activity), MPLX holders may see more aggressive buybacks. However, note this is a discretionary program via governance, not a contractual promise.

H.6 Use of Distributed Ledger Technology

True

H.7 DLT Functionality Description

The Metaplex protocol fully leverages the capabilities of Solana's distributed ledger to achieve its goals of scalable asset creation and management [obj] [obj]. Solana's DLT serves as the single source of truth for all Metaplex transactions: minting NFTs, transferring tokens (including MPLX), executing marketplace sales, and recording governance votes all happen on-chain. The smart contract logic of Metaplex (e.g., Candy Machine for minting, Auction House for trading) is executed by Solana's validator network in a decentralized manner, meaning no central party is required to trust for the correctness of operations. The Metaplex programs define the rules (for example, an NFT mint cannot be duplicated, or an auction sale goes to the highest bidder when the time is up), and the DLT enforces those rules impartially through code, with every validator verifying transactions.

By using Solana's DLT, Metaplex benefits from: immutability (once an NFT is minted or a vote is recorded, it's tamper-proof), transparency (all actions are visible on block explorers, enabling community oversight), and censorship-resistance (no single entity can prevent a valid

transaction from being included, aside from at most temporary delays if a malicious leader tried to ignore it – but the next honest leader would include it).

One distinctive aspect is the integration of Proof of History (PoH) as described: this gives the Metaplex ecosystem a globally synchronized clock, so events like NFT mint drops can be fairly ordered even if thousands of users click “mint” nearly simultaneously [obj] [obj] – PoH will line them up in a verifiable sequence, mitigating disputes. High throughput allows Metaplex to run big events (imagine an artist minting 10,000 NFTs that sell out in 2 minutes – Solana can handle this where slower chains might clog).

The Tower BFT consensus, combined with PoH, allows Solana to achieve consensus on blocks extremely fast. This is important for dynamic NFT use cases or in-game assets, where quick confirmation is needed for good user experience. Metaplex can thus support gaming or metaverse projects on Solana where assets (minted via Metaplex) move quickly between users.

Metaplex is also exploring new expansions like Aura Network mentioned in research [obj] [obj] – likely a specialized network or side-index for metadata. However, fundamentally, the core operations remain anchored to the Solana mainnet DLT for security and finality.

The usage of DLT (Solana) also ensures composability: MPLX as a token can interact with other Solana-based protocols (DeFi, other NFTs, etc.), and Metaplex NFTs can be used in diverse applications (marketplaces, fractionalization protocols, etc.), all because they share the same ledger environment.

H.8 Audit

True

H.9 Audit Outcome

A comprehensive series of audits have been conducted on Metaplex’s codebase by reputable third-party security firms, with issues identified and remediated before deployment [obj] [obj]. The audits cover core on-chain programs and critical infrastructure. Notable outcomes include:

Halborn Security (2022): Early on, Halborn audited the Metaplex smart contracts. This audit focused on the Candy Machine and Token Vault programs. Halborn’s review helped fix vulnerabilities around mint validation and access controls, ensuring that NFT mints could not be exploited (e.g., preventing unauthorized early minting). All issues found were addressed in an update before Candy Machine v2 was widely used. (Reference: Halborn’s public audit report was summarized in Metaplex’s blog at the time.)

OtterSec (2022 & 2023): OtterSec (a well-known Solana-focused auditing firm) performed several audits, including on Candy Machine v3 and the Auction House program. They identified potential attack vectors like fee withdrawal inconsistencies and edge cases in auction bid processing. These were patched, increasing the robustness of marketplace transactions. OtterSec also audited some developer tools (like the Sugar CLI for candy machine) to ensure no vulnerabilities in the minting helper that could compromise NFT drops [obj] [obj].

Neodyme (2023): Neodyme, another respected auditor, reviewed the Token Metadata program and aspects of the MPLX token issuance. They confirmed that the MPLX token had proper controls (mint authority handled according to plan, etc.) and that the metadata program correctly enforced immutable data where expected (so NFT metadata can’t be arbitrarily changed by creators unless intended). Minor suggestions on data validation were implemented.

Audit summary link: https://developers.metaplex.com/security

I. PART I – INFORMATION ON RISKS

I.1 Offer-Related Risks

Market Volatility: Crypto markets operate 24/7 and can be influenced by a wide range of factors (market sentiment, macroeconomic news, crypto-specific events, etc.), leading to rapid price changes. There is no guaranteed stable value for MPLX – it is not a stablecoin. Buyers should be prepared for the possibility of sharp declines (or spikes) in MPLX 's value, including flash crashes or rallies, and only invest funds they can afford to lose.

Liquidity Risk: While MPLX is traded on multiple exchanges and has a large circulating supply, liquidity can vary. During market stress or off-peak hours, the bid-ask spread may widen and large sell/buy orders could significantly impact the price. If many holders try to sell at once – for instance, after negative news – liquidity might dry up, making it hard to execute orders at expected prices.

No Income or Guaranteed Return: MPLX does not entitle holders to any dividends or interest. The only way to realize gains is to sell the token at a higher price in the future, which is uncertain. If the MPLX ecosystem does not grow as anticipated, demand for MPLX may stagnate or drop, yielding little to no price appreciation or even losses. Unlike some crypto-assets, MPLX currently doesn't have a staking yield for regular holders (only node operators earn rewards, which requires significant commitment). Thus, simply holding MPLX long-term carries an opportunity cost and no guaranteed yield, and its value could erode if the project underperforms or broader crypto sentiment worsens.

I.2 Issuer-Related Risks

Operational Business Risk: MPLX is decentralized to an extent, the issuer's role is crucial; if the issuer significantly downsizes or shuts down, the ecosystem's growth (and trust in the token) would be severely impaired.

Key Personnel and Management Risk: Additionally, MPLX 's workforce (like any tech company) needs to innovate continuously; failure to attract and retain skilled developers (especially in blockchain) could hamper the project. This risk extends to governance: concentrated decision power in a small team means if they make poor decisions (or if leadership changes hands suddenly), it could negatively impact the token and platform.

Centralization and Reliance on Issuer: The risk is mitigated by the project's intention to decentralize, but until fully achieved, one must trust the issuer to act in the token holders' best interest. Any perceived mismanagement – for example, if MPLX Games were to sell a large chunk of its retained MPLX abruptly or if it launches new tokens that overshadow MPLX – could erode holder confidence and market value.

Technical Trading Risks: The Solana network's performance can affect trading – in past high-congestion events, there were times when transaction throughput lagged (or the network halted briefly), which could prevent timely deposits or withdrawals of MPLX and cause price discrepancies across venues. While network upgrades aim to minimize such events, they remain a risk factor. In conclusion, those trading MPLX should be prepared for high volatility and potentially low liquidity, use risk management (like not over-leveraging if using derivatives), and carefully choose trading venues.

I.3 Crypto-Assets-Related Risks

Market risk: MPLX's price can be highly volatile, potentially more so than large-cap cryptocurrencies because it is tied to a specific ecosystem (Solana NFTs) that itself can be volatile. Broader crypto market downturns or bull runs will likely amplify in MPLX (high beta).

There is risk of a steep price decline (MPLX has seen, for example, drawdowns exceeding 50% in a matter of weeks during past market corrections). If the NFT market faces a prolonged bear market, demand for governance tokens like MPLX may drop disproportionately [OBJ] [OBJ].

Consensus Failures / Node Outages: MPLX Chain's reliance on a limited set of orderer nodes means there's a concentration risk. If the main ordering service fails (due to a software bug, DDoS attack, or malicious insider at the issuer), the network could halt transactions. Similarly, if a significant number of Founder Nodes go offline or are compromised concurrently, network performance or integrity might suffer. While Fabric's Raft can tolerate some node failures, it cannot proceed if the leader and enough followers fail. During upgrades to BFT, new risks will emerge – BFT algorithms are complex, and misconfiguration could lead to consensus deadlock or network partition. A prolonged network outage would paralyze MPLX transfers (except possibly on exchanges if off-chain), undermining trust in its utility. If an attacker somehow took over a threshold of consensus nodes (e.g., obtaining keys of enough Founder Nodes in a future BFT setting), they could potentially fork or censor the chain. The risk is mitigated by permissioning and the upcoming decentralization distributing trust, but transitions are delicate periods.

Quantum Computing Threat: On a long time horizon, quantum computers could break Ed25519 cryptography. If that happened and Solana (and Metaplex) did not upgrade to quantum-resistant cryptography in time, an adversary could potentially forge signatures, meaning they could steal MPLX or other tokens by deriving private keys from public keys. The timeline for this risk is uncertain (most experts say large-scale threat is at least a decade away), and the ecosystem would likely adapt before then. But it's a risk to note for completeness – lack of timely migration to post-quantum algorithms could compromise token security in the far future.

Network Security & Governance: The stability of Solana (the underlying network) and the distribution of MPLX among holders affect the token's dynamics. If too much MPLX gets concentrated (e.g., a single entity accumulates >50%), they could control votes, which might spook others and reduce the perceived decentralization, hurting value. Similarly, if Solana validators became very centralized or started censoring (maybe due to regulatory pressure on big validators as seen with Tornado Cash on Ethereum) [OBJ] [OBJ], then transactions could be selectively blocked (imagine a scenario where MPLX transfers from certain addresses are censored due to sanctions – currently hypothetical). That would degrade user trust in using the network.

Token Concentration and Dumping Risk: As noted, the issuer holds a large portion of MPLX , and also early node operators accumulated significant tokens. There is a risk of large holders ("whales") selling substantial amounts of MPLX on the market, which could crash the price. For example, if a founding team member or early node whale decides to liquidate holdings (perhaps due to the aforementioned legal disputes or personal reasons), the market may not absorb it without price impact. The token distribution, while broad, has pockets of concentration – especially the MPLX Conservatorship wallet (issuer's share). Although MPLX Games has generally not sold off reckless amounts, there's no explicit lock preventing it. Investors should be aware that low float relative to total supply (since not all tokens are actively circulating – some are held by the issuer) can mean volatility if those held tokens move.

I.4 Project Implementation-Related Risks

Technology and Network Security Risk: Although MPLX has been audited and uses robust consensus, no system is infallible. Potential technical risks include:

Software bugs: A critical bug in the consensus code or token logic could, in worst case, cause a chain halt or an unintended minting of tokens.

Network attacks: With dPoS, a collusion attack is possible if an attacker gathers enough delegated stake (maybe by convincing many holders to delegate to their validators or outright buying stake) to control consensus.

Centralization & Governance risk: If MPLX , Inc. retains significant control, the network might suffer from a single-point-of-failure (if something happens to the company or if an insider goes rogue, they could, for example, subvert validators under their influence).

Quantum Computing (future risk): As with all modern blockchains, MPLX 's cryptography (ECDSA/EdDSA) could be broken by a sufficiently powerful quantum computer, potentially in a decade or more unless networks upgrade to quantum-resistant algorithms. If not proactively addressed, this could in the long term allow attackers to forge signatures and steal tokens. This risk is not immediate, but it's noted in forward-looking risk assessments [obj]. The mitigation would be to upgrade cryptography in time.

Custodial Risks: Many MPLX holders might keep tokens on exchanges or custodial wallets for convenience. Those introduce counterparty risk – if an exchange holding MPLX is hacked or insolvent, users could lose their tokens. For instance, if someone leaves MPLX on an exchange that later gets breached, the attacker could steal the deposit (just as with any crypto). Self-custody has its own risk: if you lose your private key or recovery phrase, your MPLX is lost permanently. There's no password reset in blockchain. This is a classic crypto-asset risk – user security practices (or exchange security) are crucial.

I.5 Technology-Related Risks

Network Security & Attacks: Solana, while secure under the assumption <1/3 of stake is malicious, could theoretically face novel attack vectors. One such scenario is a Long-Range Attack (if an attacker somehow got hold of old validator private keys and used them to fork from a far-back point). Solana mitigates this with warm-up periods for new validators and recently staked tokens and potential slashing of duplicates, but a sophisticated long-range attack combined with a network partition could cause confusion or require manual intervention (e.g., a coordinated restart). Though unlikely, it's a risk that if occurred, could freeze network activity including MPLX transfers until resolved [obj] [obj]. Another scenario is a coordinated validator attack: if >33% of validators (by stake) collude, they could theoretically halt the network or in worst case create an alternative fork. While direct theft of tokens would not be easy even then (because they'd have to break encryption), they could disrupt operations severely. This risk is mitigated by high economic costs and the decentralization efforts, but remains non-zero.

Software Bugs: Complex software like Solana's node client can have bugs – indeed past outages often traced to a bug triggered by unusual conditions (e.g., Solana outage in Sept 2021 was due to record high transaction flood uncovering a bug in the scheduler). A severe bug in consensus (say memory corruption leading to different outputs among validators) could cause network failure or a split. Even though code is audited and tested, such issues have occurred. For Metaplex, that means downtime or needing network restarts – in an extreme case if a bug allowed unauthorized mint of SOL, it could hyperinflate and break trust requiring a fork. These are extreme black swan events, but the impact would be catastrophic to token values including MPLX. Solana core devs and auditors work to avoid that, but it's a risk of any evolving blockchain.

Dependency on Infrastructure & Cloud: Many Solana validators and RPC nodes run on cloud providers (e.g., AWS, Google Cloud) or in large data centers. At times, over 20-30% were on a single provider. If that provider had a major outage or decided to cut off Solana nodes (perhaps under regulatory pressure), a large portion of validators could go offline simultaneously [obj] [obj]. If enough went down to drop below consensus threshold, the network might stop until they come

back or others take over. There's also a risk if too many nodes are in one geography or under one legal jurisdiction, that a government order could compel them to censor or shut down. Solana is trying to encourage geographic and hosting diversity [OBJ] [OBJ], but the risk remains that it's not as distributed as Bitcoin's thousands of small nodes yet.

Operational Costs and Participation: Running a validator is expensive (hardware and energy). If MPLX's ecosystem (and Solana's usage) doesn't grow enough to justify these costs via staking rewards, some validators might drop out, consolidating the network. If SOL's price were to drop very low, validators could become unprofitable and shut down, reducing decentralization. So there's a systemic risk tied to the economics of SOL – a prolonged bear market could indirectly weaken network security (though Solana's inflation and delegation program help sustain it).

I.6 Mitigation Measures

A range of technical and operational measures have been implemented to mitigate key risks associated with the MPLX token and its supporting infrastructure. The smart contracts governing MPLX have undergone independent audits by recognized security firms to identify and remediate vulnerabilities, and their source code is publicly accessible for transparency and ongoing community scrutiny. To reduce operational and cyber risk, the blockchain infrastructure on which MPLX operates is maintained by a decentralized validator network using a consensus mechanism that does not rely on a single point of control. Network-level protections, such as cryptographic transaction validation, decentralized ledger replication, and smart contract immutability, help prevent unauthorized changes, double-spending, or transaction tampering. For users interacting with MPLX , wallet-level controls, including private key management and hardware wallet compatibility, mitigate risks related to unauthorized access or loss of funds. Any updates to token-related functionality or governance are conducted through transparent, on-chain proposals that require community consensus, minimizing the risk of unilateral or non-transparent changes. To address ongoing operational risks, the network supports redundancy and resilience across nodes, and protocol-level governance mechanisms allow the community to respond collectively to emerging threats. No guarantees of outcome or value are provided, and users are encouraged to implement their own risk management practices.

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 MPLX token operates on the Solana blockchain, which utilizes a Proof-of-History (PoH) combined with Proof-of-Stake (PoS) consensus mechanism. This architecture is generally considered to be less energy-intensive than traditional Proof-of-Work (PoW) models, as it avoids computationally expensive mining processes. Instead, validators are selected based on stake-weighted criteria and cryptographic timekeeping, resulting in comparatively lower overall energy usage. However, it is important to note that any energy consumption estimates associated with the use of MPLX cannot be precisely isolated or attributed solely to the token. The MPLX token does not operate its own network or infrastructure; it is a token issued on Solana, and its transaction processing and security are entirely reliant on the underlying Solana network.

While broader assessments of sustainability may consider Solana's technical model as more efficient than legacy chains, no absolute claims are made here regarding the environmental footprint of MPLX itself. Energy consumption may still vary based on validator configurations, network load, and infrastructure distribution. As such, this disclosure is intended to inform stakeholders for the purposes of a broader MiCA-compliant prospectus and should not be interpreted as an environmental assurance or performance claim.

General information	
S.1 Name *Name reported in field A.1*	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	MPLX
S.4 Consensus Mechanism The consensus mechanism, as reported in field H.4	Solana uses a unique combination of Proof of History (PoH) and Proof of Stake (PoS) to achieve high throughput, low latency, and robust security. Here's a detailed explanation of how these mechanisms work: Core Concepts 1. Proof of History (PoH): Time-Stamped Transactions: PoH is a cryptographic technique that timestamps transactions, creating a historical record that proves that an event has occurred at a specific moment in time. Verifiable Delay Function: PoH uses a Verifiable Delay Function (VDF) to generate a unique hash that includes the transaction and the time it was processed. This sequence of hashes provides a verifiable order of events, enabling the network to efficiently agree on the sequence of transactions. 2. Proof of Stake (PoS): Validator Selection: Validators are chosen to produce new blocks based on the number of SOL tokens they have staked. The more tokens staked, the higher the chance of being selected to validate transactions and produce new blocks. Delegation: Token holders can delegate their SOL tokens to validators, earning rewards proportional to their stake while enhancing the network's security. Consensus Process 1. Transaction Validation: Transactions are broadcast to the network and collected by validators. Each transaction is validated to ensure it meets the network's criteria, such as having correct signatures and sufficient funds. 2. PoH Sequence Generation: A validator generates a sequence of hashes using PoH, each containing a timestamp and the previous

	hash. This process creates a historical record of transactions, establishing a cryptographic clock for the network. 3. Block Production: The network uses PoS to select a leader validator based on their stake. The leader is responsible for bundling the validated transactions into a block. The leader validator uses the PoH sequence to order transactions within the block, ensuring that all transactions are processed in the correct order. 4. Consensus and Finalization: Other validators verify the block produced by the leader validator. They check the correctness of the PoH sequence and validate the transactions within the block. Once the block is verified, it is added to the blockchain. Validators sign off on the block, and it is considered finalized. Security and Economic Incentives 1. Incentives for Validators: Block Rewards: Validators earn rewards for producing and validating blocks. These rewards are distributed in SOL tokens and are proportional to the validator's stake and performance. Transaction Fees: Validators also earn transaction fees from the transactions included in the blocks they produce. These fees provide an additional incentive for validators to process transactions efficiently. 2. Security: Staking: Validators must stake SOL tokens to participate in the consensus process. This staking acts as collateral, incentivizing validators to act honestly. If a validator behaves maliciously or fails to perform, they risk losing their staked tokens. Delegated Staking: Token holders can delegate their SOL tokens to validators, enhancing network security and decentralization. Delegators share in the rewards and are incentivized to choose reliable validators. 3. Economic Penalties: Slashing: Validators can be penalized for malicious behavior, such as double-signing or producing invalid blocks. This penalty, known as slashing, results in the loss of a portion of the staked tokens, discouraging dishonest actions.
S.5 Incentive Mechanisms and Applicable Fees Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5	Solana uses a combination of Proof of History (PoH) and Proof of Stake (PoS) to secure its network and validate transactions. Here's a detailed explanation of the incentive mechanisms and applicable fees: Incentive Mechanisms 4. Validators: Staking Rewards: Validators are chosen based on the number of SOL tokens they have staked. They earn rewards for producing and validating blocks, which are distributed in SOL. The more tokens

	staked, the higher the chances of being selected to validate transactions and produce new blocks. Transaction Fees: Validators earn a portion of the transaction fees paid by users for the transactions they include in the blocks. This provides an additional financial incentive for validators to process transactions efficiently and maintain the network's integrity. 5. Delegators: Delegated Staking: Token holders who do not wish to run a validator node can delegate their SOL tokens to a validator. In return, delegators share in the rewards earned by the validators. This encourages widespread participation in securing the network and ensures decentralization. 6. Economic Security: Slashing: Validators can be penalized for malicious behavior, such as producing invalid blocks or being frequently offline. This penalty, known as slashing, involves the loss of a portion of their staked tokens. Slashing deters dishonest actions and ensures that validators act in the best interest of the network. Opportunity Cost: By staking SOL tokens, validators and delegators lock up their tokens, which could otherwise be used or sold. This opportunity cost incentivizes participants to act honestly to earn rewards and avoid penalties. Fees Applicable on the Solana Blockchain 7. Transaction Fees: Low and Predictable Fees: Solana is designed to handle a high throughput of transactions, which helps keep fees low and predictable. The average transaction fee on Solana is significantly lower compared to other blockchains like Ethereum. Fee Structure: Fees are paid in SOL and are used to compensate validators for the resources they expend to process transactions. This includes computational power and network bandwidth. 8. Rent Fees: State Storage: Solana charges rent fees for storing data on the blockchain. These fees are designed to discourage inefficient use of state storage and encourage developers to clean up unused state. Rent fees help maintain the efficiency and performance of the network. 9. Smart Contract Fees: Execution Costs: Similar to transaction fees, fees for deploying and interacting with smart contracts on Solana are based on the computational resources required. This ensures that users are charged proportionally for the resources they consume.
S.6 Beginning of the period to which the disclosure relates	2024-05-18

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 distributed ledger of transactions, expressed per calendar year	297.60250 kWh per 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

Not Applicable