MiCA White Paper

Polkadot (DOT)

Version 1.0
June 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 DOT (Polkadot), even though Polkadot 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, Polkadot 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.As one of the most prominent multichain blockchain networks, Polkadot plays a critical role in the Web3 ecosystem by enabling interoperability among diverse blockchains and supporting scalable decentralized applications. Polkadot's unique architecture—featuring a central Relay Chain, parachains (parallel blockchains), and a Nominated Proof-of-Stake consensus—allows high throughput and secure cross-chain communication, making it a foundational infrastructure for DeFi, NFTs, and innovative cross-chain services. This white paper provides comprehensive regulatory disclosure about Polkadot (DOT), ensuring market participants have clear insights into its issuer (foundations and community), key features, rights and obligations for holders, underlying technology, environmental impact, associated risks, marketing approach, and details of its offering and distribution within the MiCA framework.

This document provides essential information about DOT's characteristics, risks, and the framework under which LCX facilitates DOT-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).

00 TABLE OF CONTENT

01 DATE OF NOTIFICATION

2025-06-04

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

Polkadot (DOT) is the native token of the Polkadot network, a heterogeneous multichain platform designed to connect multiple specialized blockchains into a unified, scalable network.Founded by Dr. Gavin Wood (former Ethereum CTO) and the Web3 Foundation in 2017, Polkadot launched its main network in 2020 after raising substantial funding (approximately $145 million in an initial coin offering in 2017, and over $200 million total through subsequent round) to develop its groundbreaking technology. DOT serves several crucial functions in the network: it is used for staking (to secure the network via Nominated Proof-of-Stake and reward validators/nominators), governance (DOT holders can vote on network upgrades and changes), and bonding (locking DOT to connect new parachains to the network).

09 Not applicable

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

Polkadot's architecture consists of a central Relay Chain that provides shared security and consensus, and numerous parachains that run in parallel to execute transactions and smart contracts. This design enables interoperability (different blockchains can communicate and transfer value) and high scalability (parallel processing of transactions across chains), with the network capable of handling on the order of 1,000 transactions per second and potentially up to 1 million TPS in theory as it expands. Polkadot uses a Nominated Proof-of-Stake (NPoS) consensus mechanism which combines a network of validators and nominators to achieve distributed security. Blocks are produced approximately every 6 seconds, and finality is ensured by a protocol called GRANDPA that finalizes blocks in a few seconds under normal conditions.

This whitepaper is prepared in compliance with MiCA regulations to provide transparency regarding DOT's listing and trading. Since DOT is already widely circulated and traded globally, this document does not represent a new issuance, public offering, or token sale but instead provides essential information about its admission to trading under the MiCA framework.

LCX facilitates the admission to trading of DOT on its regulated trading platform, ensuring compliance with MiCA regulations and providing a secure and transparent marketplace for DOT trading.

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. 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

Web3 Foundation

B.3 Legal Form

Not applicable

B.4 Registered Address

Not applicable

B.5 Head Office

Not applicable

B.6 Registration Date

Not applicable

B.7 Legal Entity Identifier

Not applicable

B.8 Another Identifier Required Pursuant to Applicable National Law

Not applicable

B.9 Parent Company

Not applicable

B.10 Members of the Management Body

Not applicable

B.11 Business Activity

Not applicable

B.12 Parent Company Business Activity

Not applicable

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

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C.5 Registration Date

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C.8 Parent Company

Not Applicable

C.9 Reason for Crypto-Asset White Paper Preparation

LCX is voluntarily preparing this MiCA-compliant whitepaper for Polkadot (DOT) to enhance transparency, regulatory clarity, and investor confidence. While Polkadot 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 DOT 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

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- 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

Polkadot (DOT)

D.2 Crypto-Assets Name

Polkadot (DOT)

D.3 Abbreviation

DOT

D.4 Crypto-Asset Project Description

Polkadot is a next-generation blockchain protocol that aims to enable a network of many blockchains (a “blockchain of blockchains”). Conceived by Dr. Gavin Wood and launched in May 2020, the Polkadot project introduces a heterogeneous multichain framework designed for scalability, interoperability, and shared security. Unlike single-chain networks, Polkadot allows multiple blockchains (called parachains) to run in parallel, all connected to a central Relay Chain which coordinates the network’s consensus and security.

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

Polkadot is an open-source blockchain with no central issuer. It is maintained by a decentralized network of developers, validators, node operators, and users worldwide.The DOT Foundation and other independent contributors drive its development.

Full Name	Business Address	Function
Dr. Gavin Wood	*Not applicable*	*Co-founder & President*
Web 3 Foundation	*Global*	*Development & Ecosystem Support*
DOT Core Developers	*Global*	*Software Development & Maintenance*
DOT Validators	*Global*	*Transaction Validation & Security (PoS)*
DOT Node Operators	*Global*	*Network Verification & Governance*

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 Polkadot (DOT) to enhance transparency, regulatory clarity, and investor confidence. While DOT 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 Polkadot 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 Polkadot in a compliant manner. It further supports the broader market adoption and integration of Polkadot 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 April 2025, about 1.57 billion DOT are in circulation.New tokens are minted at an annual rate of around 8% of the total supply (approximately 120 million DOT per year) as of 2024, with about 85% of rewards going to stakers and 15% to the on-chain treasury. This inflation incentivizes participation in network security and funds ecosystem development, and is governed by Polkadot’s on-chain governance (which can adjust parameters over time). There is no maximum supply cap for DOT; instead, issuance is algorithmic and subject to community governance decisions.

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

Not applicable

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

DOT is widely traded on numerous cryptocurrency exchanges globally (both regulated and unregulated). As a decentralized asset, DOT 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 DOT trading (pair DOT/EUR). To access DOT 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 – DOT as a crypto-asset itself is not governed by any specific national law or jurisdiction. Polkadot is a decentralized network that operates on a global scale, and DOT tokens exist on the blockchain independent of legal jurisdiction. There is no contractual framework (like an investment contract or debt instrument) attached to DOT that would be subject to a governing law clause.

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

Polkadot is open-source, with its code primarily written in Rust and developed using Parity's Substrate framework. Substrate provides a modular toolkit for building blockchains, which has enabled teams to create new parachains efficiently and also ensures that Polkadot itself is built on a reliable, tested stack. As a result, Polkadot has a vibrant ecosystem of parachains addressing various use cases (DeFi, identity, gaming, Internet of Things, etc.), all secured under the Polkadot Relay Chain. By the end of 2024, over 50 parachains were live on Polkadot's network, and parachain slot auctions (the process by which parachains secure a connection to the Relay Chain) are an ongoing, competitive aspect of the ecosystem.

F.3 Planned Application of Functionalities

DOT is already fully functional and integrated into the The open network's operations. There are no new planned uses of DOT outside its current role, as its role is fundamental and ongoing. It will continue to be used as: the gas token for all transactions on Polkadot; the staking asset for validators (and delegation by token holders) to keep the network secure; and the base asset for the ecosystem's DeFi and commerce.

F.4 Type of white paper

OTHR

F.5 The type of submission

NEWT

F.6 Crypto-Asset Characteristics

Polkadot is a next-generation blockchain protocol that aims to enable a network of many blockchains (a "blockchain of blockchains"). Conceived by Dr. Gavin Wood and launched in May 2020, the Polkadot project introduces a heterogeneous multichain framework designed for scalability, interoperability, and shared security. Unlike single-chain networks, Polkadot allows multiple blockchains (called parachains) to run in parallel, all connected to a central Relay Chain which coordinates the network's consensus and security. At its core, Polkadot addresses three fundamental challenges of blockchain technology: scalability, interoperability, and governance. By processing transactions on many parachains simultaneously, Polkadot significantly increases throughput compared to legacy chains – the network can handle on the order of 1,000 transactions per second under current configurations, and theoretical models suggest it could scale to upwards of 1,000,000 TPS as more parachains and optimizations are added. Transactions on Polkadot confirm rapidly: the Relay Chain produces blocks roughly every 6 seconds, and finality (irreversibility of blocks) is typically achieved within one or two block intervals thanks to a dedicated finality gadget. This enables near real-time confirmation of cross-chain transfers and updates.

F.7 Commercial name or trading name

Polkadot

F.8 Website of the issuer

Not applicable

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

2025-07-08

F.10 Publication date

2025-07-08

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

P5B46MFPP

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

Purchasers or holders of DOT do not acquire any specific contractual rights or legal claims against an issuer or anyone else by holding the token. DOT is a decentralized network token, not a share or debt instrument; therefore, owning DOT grants no governance rights in a legal entity, no entitlement to dividends, profits, or any form of interest, and no claim on any underlying assets or collateral.

G.2 Exercise of Rights and Obligation

Because holding DOT does not bestow contractual rights, there is no traditional “exercise” of rights as one might have with a security or utility token tied to services. The rights that do exist (use of the network) are exercised simply by using the token: e.g., to exercise the “right” to transfer DOT, the holder creates a transaction and signs it with their private key; to exercise the “right” to stake, the holder delegates their DOT to a validator via a staking transaction. These actions are carried out on-chain and are validated by the decentralized network.

G.3 Conditions for Modifications of Rights and Obligations

Since there are no formal contractual rights attached to DOT, modifications in the “rights and obligations” sense mostly pertain to changes in the protocol rules of the DOT network. Any changes to how DOT works (for example, changes to staking yield, fee structure, or adding on-chain governance features in the future) would require a network upgrade. DOT’s upgrade process is decentralized: core developers may propose changes via software updates, but these changes only take effect if a sufficient portion of the community (especially validators) adopts the new software version.

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

Not applicable- Polkadot’s supply is governed by a fixed protocol (inflation rate ~0.6% and fee burn) but there is no discretionary mechanism that adjusts supply based on external metrics or targets (like no algorithmic peg, no central bank-like policy).The supply increases at a known, coded rate (block rewards) and decreases via burns. This is not considered a “supply adjustment mechanism” in the

regulatory sense, which refers to mechanisms for stablecoins or similar that actively manage supply to maintain value.

G.13 Supply Adjustment Mechanisms

The DOT token employs a dynamic supply model designed to balance network security, governance participation, and inflation control. DOT does not have a fixed supply; instead, it utilizes a protocol-level mechanism that adjusts the token issuance rate based on staking participation. The ideal staking rate is targeted at 50% of the total DOT supply. If the actual staking rate falls below this threshold, the network increases the inflation rate to incentivize more staking. Conversely, if staking exceeds 50%, the inflation rate is decreased. This mechanism ensures economic equilibrium by aligning incentives across validators and nominators, promoting active network participation while preventing excessive inflation. The resulting supply elasticity allows DOT to adapt to changing network conditions and demand, supporting long-term sustainability and decentralization. The minting process and inflation curve are algorithmically governed and transparent, with updates subject to on-chain governance procedures.

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 previously noted, Polkadot (DOT) is not governed by any specific national contract or securities law as an instrument. The rights of DOT holders are defined by code (DOT protocol) and not by a contract enforceable in court.

G.19 Competent Court

Not applicable - As Polkadot (DOT) 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

Polkadot utilizes its own purpose-built distributed ledger technology (DLT) infrastructure. The underlying technology stack of Polkadot has been developed from the ground up (primarily in Rust via the Substrate framework) and is distinct from legacy blockchains, though it draws on proven cryptographic and distributed systems principles. Below is an overview of the DLT and technical standards Polkadot employs:

Polkadot operates a public, permissionless blockchain network known as the Relay Chain. This Relay Chain is the heart of Polkadot's DLT, coordinating a set of validators who maintain the ledger's state and consensus. The ledger itself does not record arbitrary smart contract code (by design, the Relay Chain's functionality is minimal for efficiency), but it records all DOT balances, accounts, and the metadata necessary for parachains (such as parachain block headers, cross-chain message queues, staking information, governance referenda, etc.). The state of the Polkadot Relay Chain is updated in

discrete blocks, each cryptographically linked (hashed) to the previous, forming the blockchain. Parachains have their own ledgers (states) that are embedded into the Relay Chain's state via Merkle proofs and consensus rules, effectively making Polkadot a sharded ledger where each shard is a parachain. Polkadot's ledger uses standard cryptographic algorithms: accounts are identified by public keys (using the Sr25519 signature scheme, an Ed25519 variant optimized for Schnorr signatures in Substrate) for transaction signing. Transactions are propagated through a peer-to-peer network of nodes and must be validated by the consensus rules. The Relay Chain's DLT ensures atomic cross-chain transactions – if a parachain transaction has dependencies on another parachain's state, the Relay Chain ensures consistency through its block finalization process, such that either all parts of a cross-chain operation succeed or none do.

DOT Whitepaper: https://polkadot.com/papers/

Public block explorer: https://polkadot.subscan.io/

DOT Main repository: https://github.com/paritytech/polkadot

DOT Developer portal: https://docs.polkadot.com/develop/

H.2 Protocols and Technical Standards

Polkadot employs a hybrid consensus comprising BABE for block production and GRANDPA for finality. BABE is similar to lottery-based Proof-of-Stake protocols (like Ouroboros used by Cardano) where validators take turns (weighted by stake) to create new blocks. GRANDPA is a Byzantine Fault Tolerant (BFT) finality protocol where validators vote on the chain heads; once 2/3+ of validators attest to a chain, all blocks up to that point are finalized. This provides fast finality and security even under network partitions.

Polkadot's consensus is designed to be secure under typical assumptions (it can tolerate up to 1/3 of validators being malicious without losing finality, a standard for BFT consensus). If more than 1/3 but less than 51% behave maliciously, finality might stall but the chain can still continue producing blocks via BABE (with probabilistic finality until GRANDPA resumes). If an attacker controlled 51% of stake, they could disrupt consensus, but economic penalties (slashing of staked DOT) are in place to deter this; a malicious majority would destroy its own stake value. The network uses grandpa authorities (the active validators) and sessions (short intervals) to frequently rotate validator duties, further securing the process.

H.3 Technology Used

At its core, Polkadot addresses three fundamental challenges of blockchain technology: scalability, interoperability, and governance.

By processing transactions on many parachains simultaneously, Polkadot significantly increases throughput compared to legacy chains – the network can handle on the order of 1,000 transactions per second under current configurations, and theoretical models suggest it could scale to upwards of 1,000,000 TPS as more parachains and optimizations are added. Transactions on Polkadot confirm rapidly: the Relay Chain produces blocks roughly every 6 seconds, and finality (irreversibility of blocks) is typically achieved within one or two block intervals thanks to a dedicated finality gadget.

This enables near real-time confirmation of cross-chain transfers and updates. Polkadot's design enables cross-chain interoperability through its Cross-Consensus Message (XCM) format, allowing parachains and external networks (via bridges) to exchange information and value in a trust-minimized way. In practice, this means assets or data can move between different blockchains connected by Polkadot, fostering an ecosystem where specialized chains (for example, one optimized for smart contracts and another for privacy or gaming) can seamlessly work together. Bridges (such

as the newly implemented Snowbridge to Ethereum in 2024) extend interoperability beyond the Polkadot ecosystem, connecting to independent networks like Ethereum, Bitcoin, and others.

Security is a key feature of Polkadot's architecture. All parachains benefit from the shared security provided by the Relay Chain's validator set. Instead of each blockchain needing to recruit its own validators or miners, Polkadot's pooled security model means that as long as the Relay Chain remains secure, all connected parachains are secure. This is achieved through a novel Nominated Proof-of-Stake (NPoS) consensus mechanism: DOT holders can nominate validators by staking tokens, and a rotating set of top validators (currently 500 active validators on Polkadot as of late 2024) produce blocks and verify parachain transactions. NPoS is designed to maximize decentralization and security by incentivizing a wide distribution of staked DOT across many validators.It balances the influence of large token holders with election algorithms that promote a fair representation of nominators, contributing to a high Nakamoto coefficient (a measure of how many entities would need to collude to compromise the network). As of October 2024, Polkadot's Nakamoto coefficient was measured at 132, indicating a robust level of decentralization in its validator set

H.4 Consensus Mechanism

Polkadot employs a hybrid consensus comprising BABE for block production and GRANDPA for finality. BABE is similar to lottery-based Proof-of-Stake protocols (like Ouroboros used by Cardano) where validators take turns (weighted by stake) to create new blocks. GRANDPA is a Byzantine Fault Tolerant (BFT) finality protocol where validators vote on the chain heads; once 2/3+ of validators attest to a chain, all blocks up to that point are finalized. This provides fast finality and security even under network partitions.

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As stataed above block production is handled by an algorithm called BABE (Blind Assignment for Blockchain Extension) which continuously generates new blocks, while GRANDPA (GHOST-based Recursive Ancestor Deriving Prefix Agreement) is the finality protocol that can finalize batches of blocks at once. This separation of duties means Polkadot can provide speedy block issuance (for liveness and network throughput) and provable finality (for security and reliability) simultaneously. Once GRANDPA finalizes a block, it is agreed by the network that the block will never be reverted, giving certainty to transactions.

H.5 Incentive Mechanisms and Applicable Fees

The Polkadot network employs a Nominated Proof-of-Stake (NPoS) consensus mechanism to incentivize network participation and ensure protocol security. Validators, who produce blocks and validate transactions, are rewarded in DOT tokens through inflationary rewards and a share of transaction fees, while nominators—token holders who delegate their stake to validators—receive a portion of these rewards based on performance.

To discourage malicious behavior, slashing penalties are imposed on validators and nominators in the event of security breaches or prolonged inactivity. Transaction fees on the network are calculated using a weight-based model that includes a base fee, a fee based on the computational weight of the transaction, and an additional charge based on the transaction's byte size.

These fees are dynamically adjusted via a congestion multiplier that responds to network demand, thereby maintaining throughput efficiency and minimizing spam.

A portion of collected fees is allocated to the Polkadot Treasury, which funds ecosystem development and governance initiatives. Furthermore, projects seeking to secure a parachain slot must participate in auctions by locking DOT, either through self-bonding or crowdloan contributions from supporters, who may in turn receive rewards from the project. All fee structures and incentives are decentralized and embedded in the protocol logic, ensuring fair distribution without centralized issuer control. This transparent and adaptive economic model supports the network's scalability, security, and decentralization objectives in line with MiCAR disclosure requirements.

H.6 Use of Distributed Ledger Technology

True

H.7 DLT Functionality Description

Polkadot leverages Distributed Ledger Technology (DLT) through a unique multichain architecture designed to enhance scalability, interoperability, and security across decentralized networks. At the heart of Polkadot is the Relay Chain, which acts as the central ledger and consensus layer, maintaining the shared security of the entire ecosystem. Connected to the Relay Chain are parachains—independent blockchains that can process transactions in parallel and interact with each other via cross-chain messaging. This enables Polkadot to function as a decentralized network of interoperable ledgers, where data and assets can be exchanged seamlessly across diverse blockchain systems.

H.8 Audit

True

H.9 Audit Outcome

The Polkadot Claims smart contract, which facilitated the initial claiming of DOT tokens on Ethereum, underwent a comprehensive audit by ChainSecurity. The audit included formal verification of 12 critical functional properties, automated vulnerability scanning, and an in-depth manual code review. The audit identified no critical or high-severity issues, while two medium and nine low-severity issues were found—all of which were either resolved or acknowledged by the Web3 Foundation. Overall, the audit confirmed the contract's robustness and alignment with best security practices.

Audit report link: https://www.chainsecurity.com/security-audit/polkadot-claims

I. PART I – INFORMATION ON RISKS

I.1 Offer-Related Risks

Market Volatility: DOT's market price is determined by supply and demand on global exchanges and can be extremely volatile. Sudden price swings may occur due to market sentiment, macroeconomic news, or events specific to the crypto industry.

Inflation and Token Dilution Risk: DOT's supply increases each year by up to 8% (subject to governance adjustments). This inflation means that holders who do not stake or otherwise engage may see their holdings diluted over time relative to the total supply. While inflation is used to reward stakers and fund the treasury (benefiting the network's security and growth), it also puts downward pressure on price if demand does not keep pace. There is a risk that if network growth or usage doesn't align with the inflation rate, the value per token could erode.

Regulatory Uncertainty in Trading: Different jurisdictions have varying stances on crypto trading. Within the EU, MiCA will harmonize rules, but depends on global level.

Competition and Adoption Risk: Polkadot operates in a highly competitive environment. There are other blockchain protocols aiming to solve similar problems (interoperability, scalability) – for instance, Cosmos with its IBC protocol, Ethereum with upcoming sharding and Layer-2 solutions, and other newer multichain projects. If developers and users choose alternative platforms over Polkadot, demand for DOT could stagnate or decline.

Operational Risks and Bugs: As with any large-scale network, Polkadot may face operational incidents. These could include network outages, slowdowns, or forks. For example, high volumes of transactions or malicious spam could conceivably strain the network or cause temporary delays (though Polkadot has demonstrated high resilience, with 99.49% of blocks produced within target time in 2024 even under load).

Trading Conditions Variability: Different trading venues might have different rules (e.g., some exchanges might not allow certain order types for Polkadot, or might have withdrawal limits).

I.2 Issuer-Related Risks

Decentralization & Ecosystem Risks. Polkadot does not have a central corporate issuer, which eliminates certain traditional issuer risks (no company to go bankrupt). However, the ecosystem supporting DOT entails several entities and factors whose risks should be considered

Lack of Central Accountability: With no central issuer, there's no entity obligated to support Polkadot's value or operations. While this is core to decentralization, it means if something goes wrong, there's no company to hold accountable or to step in with fixes. The network is maintained by open-source contributors – if they lost interest or funding, development could slow, affecting DOT's competitiveness.

DOT Foundation & Core Developers: The DOT Foundation plays a key role in funding and guiding development. If the Foundation faces issues (legal actions, loss of funds, internal disputes) or ceases operations, the momentum of the project could suffer. Similarly, core developers leaving or project leadership changes could introduce uncertainty. Although the project can continue with community effort, a loss of key talent might delay critical upgrades or reduce confidence.

Regulatory/Legal Risks for Ecosystem Entities: While DOT token itself is decentralized, specific bodies like the DOT Foundation, or even Telegram (which is not officially involved now but historically linked) could become targets of regulatory actions

Network Governance & Forks: Upgrades to DOT require community consensus (as described). While this decentralization is a strength, it also poses a risk: disagreements among core contributors or validators might slow down decision-making or, in extreme cases, lead to chain splits (forks).

Validator Centralization: If a large portion of DOT's staking power concentrates in a few validators or pools, those entities could wield outsized influence on network decisions and block production.

Operational Security: The DOT Foundation and core devs not being a formal company means no formal service level guarantees. Network infrastructure (like explorers, official websites) could be attacked or go down. The community would have to rally to fix issues. For instance, if a critical bug was found, the decentralized nature means coordinating a fix might be slower than in a centralized project where an issuer could force-update nodes.

I.3 Crypto-Assets-Related Risks

Intrinsic Risks of Polkadot as a Crypto-Asset. These encompass general risks of holding crypto and specifics of Polkadot

High Volatility & Market Risk: (This overlaps with I.1 but is worth reiterating.) Polkadot's price can rise or fall drastically. It has no inherent value guarantee; its price is determined by market demand. A Polkadot holder faces the risk of losing a substantial portion or even all of their investment if the market moves negatively.

Lack of Intrinsic Value: Polkadot's value is not backed by any physical commodity or government decree. Its value derives from utility (needed for fees/staking) and network effect. If the DOT network's usage does not grow as expected or if another cryptocurrency outshines Polkadot in utility, demand for Polkadot could diminish. Without a backing or guaranteed redemption, holders rely solely on market sentiment.

Liquidity and Accessibility: Polkadot is currently accessible on many exchanges, but regulatory changes could affect that (for instance, if a jurisdiction bars trading of non-compliant crypto). Additionally, though Polkadot has grown in popularity, it is still not as universally recognized as Bitcoin or Ether. In certain situations (market crash or exchange issues), liquidity could dry up and holders might struggle to quickly convert Polkadot to fiat or other assets

Custodial Risk: Holding Polkadot requires secure storage of private keys. If a holder uses a self-custody wallet, loss of the private key or seed phrase means permanent loss of the Polkadot.There is no recovery mechanism (no bank to reset a password).

Regulatory and Taxation Risks: Owning Polkadot might have legal implications depending on jurisdiction. Some countries may impose taxes on crypto holdings or transactions (capital gains tax, VAT, etc.)

Network Security & Technical Risks: DOT's technology, while advanced, is not immune to potential bugs or attacks. There's a risk (albeit seemingly low with current knowledge) of a consensus failure – if, say, a severe bug caused the network to halt or allowed double-spending until patched, that could severely impact trust and value.

Competition: There are many blockchain platforms (Ethereum, Binance Smart Chain, Solana, Cardano, etc.). Polkadot's value depends partly on the success of DOT relative to competitors. If DOT fails to attract developers or users and a competing network becomes dominant for the same use cases, Polkadot demand could stagnate or fall. Conversely, if DOT finds a niche (like Telegram integration) and thrives, Polkadot could gain. But that competitive uncertainty is a risk – the ecosystem's growth is not guaranteed.

Sustainability of Staking Rewards: Currently, validators are incentivized by inflationary rewards. Over time, if the DOT economy relies more on fees and less on inflation (as intended), that shift must be managed. If network activity doesn't increase to provide sufficient fee revenue but inflation is reduced (or large supply enters circulation from unlocks), validator incentives could diminish, potentially affecting security if not enough stake finds it profitable to validate. This is a longer-term systemic risk: balancing security budget vs. token economics.

I.4 Project Implementation-Related Risks

These concern the execution of the DOT project's roadmap and ecosystem growth:

Development Risk: Polkadot's architecture, centered around its relay chain and parachain model, introduces complex interoperability risks. Any failure in parachain onboarding or miscommunication between chains can impact the stability of the entire network. Additionally, there are risks stemming from code vulnerabilities, especially since Polkadot allows on-chain upgrades that modify its runtime logic. Mistakes in governance-approved upgrades could introduce bugs or unintended behaviors. The reliability of validators is another risk factor, as the network depends on them for consensus and block finality—downtime or collusion among validators could lead to network halts or attacks. Moreover, bridge protocols, essential for connecting with external ecosystems like Ethereum, often present critical cybersecurity risks as they can become attack vectors, potentially resulting in significant asset losses.

Operation and execution risk:Polkadot's success depends heavily on its broader ecosystem of parachains and dApps, many of which are independent projects. If major parachains fail or underperform, it could diminish the overall utility and adoption of the DOT token. Despite being designed for scalability, increased activity from more parachains and applications could still cause network congestion or performance issues. Additionally, delays in delivering key roadmap items—such as asynchronous cross-chain messaging (XCMP) or more advanced governance modules—may disrupt implementation timelines and shake investor confidence.

Governance Risk: Polkadot employs a sophisticated on-chain governance model where DOT holders vote on proposals. However, this model carries risks of centralized control if large token holders dominate voting power. This could lead to decisions that serve specific interests rather than the broader community. The potential for governance manipulation also raises concerns about long-term sustainability and fairness. Furthermore, contentious decisions may lead to network splits or forks, which could fracture community support and reduce token value.

Market and investor related risk: The DOT token is a utility token and not backed by reserves, meaning its value is highly speculative and market-driven. Sharp price volatility can occur due to investor sentiment, market cycles, or macroeconomic conditions. In periods of low market activity or during bear markets, liquidity constraints could increase slippage and discourage trading. Furthermore, token lockups and unlocks, such as those related to staking or crowdloans, may result in sudden surges in circulating supply, exerting downward pressure on price stability.

Partnership and Use-Case Risk: Real-world usage often comes from partnerships (e.g., with payment providers, enterprises, or DeFi platforms). If DOT fails to secure meaningful partnerships or if anticipated use cases do not pan out (for example, if decentralized storage via DOT Storage doesn't attract usage against competitors like IPFS/Filecoin), then the broader value proposition could weaken. Relying on the community to organically drive all use cases can be slow.

Business continuity challenges: Polkadot must ensure robust business continuity planning, especially around critical functions like staking, governance, parachain auctions, and relay chain operations. Any prolonged downtime, governance failure, or system malfunction may severely affect network stability and user trust. The ecosystem's heavy reliance on external third-party contributors, such as parachain developers or infrastructure providers, introduces outsourcing and dependency risks—any service disruption or withdrawal could compromise the core value proposition of the Polkadot network.

I.5 Technology-Related Risks

The Polkadot blockchain employs a novel and complex technological architecture designed for interoperability and scalability. While innovative, this design introduces various implementation, security, and operational risks that must be transparently disclosed.Below is a detailed breakdown of key technology-related risks for DOT:

Relay Chain and Parachain failure: If the relay chain fails or becomes unstable (due to bugs, congestion, or a governance error), all connected parachains may be impacted, leading to potential network outages or halted transactions. The entire ecosystem is interdependent; thus, a fault in one component can have cascading effects across the network.

Interoperability risk:Interoperability introduces coordination risks. If message queues fail, misroute, or become congested, it could lead to incomplete or inconsistent transactions across chains. This may result in loss of funds, denial of service, or network partitioning, especially for applications dependent on cross-chain data.

Runtime upgrade risks:These upgrades, if not properly reviewed or tested, can introduce critical bugs or exploits into the network. Malicious proposals, rushed voting, or implementation oversights may lead to unexpected network behavior or vulnerabilities exploitable by attackers.

Validator vulnerabilities: If a large number of validators become unavailable or collude maliciously, it could result in block production halts, finality delays, or chain reorganization. Additionally, a poor selection of validators by nominators (e.g., sybil or malicious actors) increases the likelihood of attacks or slashing events.

Bridge protocol security risk:Bridges are historically prime targets for exploits, with vulnerabilities in their consensus, signature validation, or message relaying. A successful attack on a Polkadot-Ethereum bridge could lead to loss or duplication of tokens, undermining confidence in DOT's ecosystem integrity.

Zero downtime upgrades:Automated or inadequately reviewed proposals may lead to a scenario where network-critical changes are deployed without proper oversight, causing system-wide malfunctions. There is also a risk of exploitation of upgrade logic via governance loopholes.

I.6 Mitigation Measures

Polkadot addresses risks arising from its core relay chain and parachain architecture by implementing a highly decentralized validator set spread across diverse jurisdictions and operators. This structure minimizes single points of failure and strengthens the network's resilience against coordinated attacks or localized outages. To ensure the technical soundness of parachains, Polkadot enforces a slot auction process, where only parachains that win support via crowdloans or staking are permitted to connect. This acts as a decentralized vetting mechanism. Additionally, Polkadot employs runtime checks and validation routines to prevent integration of faulty parachain code into the relay chain.

Polkadot's cross-chain messaging system, known as XCMP (Cross-Chain Message Passing), is rolled out incrementally to allow time for extensive testing and refinement. Initial versions like XCMP-lite provide secure message routing with simplified assumptions, and more complex layers are added gradually. Governance approval is required before upgrades are enacted, ensuring transparency and community scrutiny. The protocol includes built-in rate-limiting to prevent congestion and ensures messages between parachains are queued and processed in a secure, ordered fashion, thus reducing the risk of cross-chain inconsistencies or service interruptions.

To mitigate risks from on-chain upgrades and smart contract vulnerabilities, Polkadot employs a transparent governance process involving proposal submission, community referendum, and an enactment delay. This ensures time for code audits, review, and rollback if vulnerabilities are found. Runtime changes, including logic updates, are implemented only after community approval and sufficient delay for external analysis. Developers working on smart contracts are encouraged to use formally verified languages like Ink!, while parachains such as Moonbeam undergo external audits. These procedures drastically reduce the likelihood of introducing bugs or malicious code during protocol updates.

Polkadot ensures validator integrity through a combination of staking economics and automatic enforcement. Malicious or underperforming validators are penalized via slashing—losing part of their staked DOT—which deters dishonest behavior. The nomination process allows token holders to select

validators they trust, and nomination pools help reduce risk by diversifying staking allocations. Validator performance metrics such as uptime and block finality rates are continuously tracked, and underperforming validators are automatically rotated out. This system ensures that only reliable and well-behaved actors participate in securing the network.

Given the historic vulnerabilities of blockchain bridges, Polkadot integrates extensive safeguards into its bridge designs. Most notably, the use of light-client protocols enables decentralized verification of state changes between chains without relying on third-party oracles. Additionally, bridges undergo multiple rounds of independent code audits before being launched. Where applicable, multi-signature or threshold signature schemes are employed to ensure that no single actor can authorize transfers or transactions across chains. These steps collectively reduce the risk of cross-chain asset loss due to compromised bridges or consensus manipulation.

Polkadot's codebase, built on the Substrate framework, is modular by design, allowing developers to isolate and test individual components (pallets) independently. This simplifies debugging and auditing, making it easier to maintain quality in a growing codebase. Automated testing pipelines, including regression and fuzz testing, are run continuously through CI/CD systems to catch errors before deployment. Furthermore, developer education is a priority: the Web3 Foundation and Parity Technologies offer grants, documentation, workshops, and direct support to ensure best practices in software development and ecosystem sustainability.

Polkadot’s governance mechanism includes safeguards to prevent hasty or harmful protocol changes. Every proposal must pass through public referenda and conviction-based voting, where longer token lockups confer greater voting weight. This discourages short-term manipulation. Proposals may also be reviewed by technical collectives or fellowship bodies with domain expertise. Once approved, an enactment delay is enforced, giving time for audits, potential challenges, or rollback. These structural protections help maintain the integrity of protocol governance and prevent accidental or malicious upgrades.

To address cryptographic integrity and future-proof the protocol, Polkadot uses the Schnorrkel signature scheme, based on Ristretto, known for both its speed and robustness. The Web3 Foundation is actively researching quantum-resistant cryptography to anticipate threats from future advancements in computing. Regular security audits and an active bug bounty program attract global white-hat researchers to test and validate the protocol's cryptographic assumptions. These proactive steps ensure that even in a rapidly evolving threat landscape, Polkadot’s cryptographic foundation remains secure.

Polkadot minimizes reliance on single service providers by encouraging diversity and redundancy across its ecosystem infrastructure. Multiple community-maintained wallets (e.g., Polkadot.js, Nova, Talisman) and RPC providers (e.g., OnFinality, Pinknode) ensure users are not reliant on any single tool. Indexers like SubQuery are open-source and widely deployed. Furthermore, critical infrastructure components are licensed under permissive open-source licenses, allowing the community to fork and maintain them if original providers discontinue service. This enhances operational continuity and reduces systemic risk from third-party dependencies.).

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

Polkadot was designed with sustainability in mind, leveraging a Proof-of-Stake consensus mechanism. While these networks inherently consume less energy per transaction compared to Proof-of-Work alternatives, it should be noted that this does not imply a net reduction of energy consumption or environmental impact in absolute terms. Rather, these mechanisms are comparatively less burdensome in terms of energy use, thereby offering a more sustainable framework in a relative sense.

The entire Polkadot network's electricity usage has been measured at roughly 70,000 kWh per year, according to a 2023 report by the Crypto Carbon Ratings Institute. This level of energy consumption is extremely modest – approximately equivalent to the yearly power usage of just 15 average U.S. households. By contrast, traditional Proof-of-Work networks consumed orders of magnitude more energy before transitioning to PoS (for example, pre-merge Ethereum used tens of TWh per year). Polkadot's low energy usage stems from its NPoS consensus, which requires only normal server hardware for validation and no energy-intensive mining computations.

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	Polkadot
S.4 Consensus Mechanism The consensus mechanism, as reported in field H.4	Polkadot DOT is present on the following networks: binance_smart_chain, huobi, polkadot. Binance Smart Chain (BSC) uses a hybrid consensus mechanism called Proof of Staked Authority (PoSA), which combines elements of Delegated Proof of Stake (DPoS) and Proof of Authority (PoA). This method ensures fast block times and low fees while maintaining a level of decentralization and security. Core Components Validators (so-called "Cabinet Members"): Validators on BSC are responsible for producing

	new blocks, validating transactions, and maintaining the network's security. To become a validator, an entity must stake a significant amount of BNB (Binance Coin). Validators are selected through staking and voting by token holders. There are 21 active validators at any given time, rotating to ensure decentralization and security. Delegators: Token holders who do not wish to run validator nodes can delegate their BNB tokens to validators. This delegation helps validators increase their stake and improves their chances of being selected to produce blocks. Delegators earn a share of the rewards that validators receive, incentivizing broad participation in network security. Candidates: Candidates are nodes that have staked the required amount of BNB and are in the pool waiting to become validators. They are essentially potential validators who are not currently active but can be elected to the validator set through community voting. Candidates play a crucial role in ensuring there is always a sufficient pool of nodes ready to take on validation tasks, thus maintaining network resilience and decentralization. Consensus Process 4. Validator Selection: Validators are chosen based on the amount of BNB staked and votes received from delegators. The more BNB staked and votes received, the higher the chance of being selected to validate transactions and produce new blocks. The selection process involves both the current validators and the pool of candidates, ensuring a dynamic and secure rotation of nodes. Block Production: The selected validators take turns producing blocks in a PoA-like manner, ensuring that blocks are generated quickly and efficiently. Validators validate transactions, add them to new blocks, and broadcast these blocks to the network. Transaction Finality: BSC achieves fast block times of around 3 seconds and quick finality. This is achieved through the efficient PoSA

	mechanism that allows validators to rapidly reach consensus. Security and Economic Incentives 7. Staking: Validators are required to stake a substantial amount of BNB, which acts as collateral to ensure their honest behavior. This staked amount can be slashed if validators act maliciously. Staking incentivizes validators to act in the network's best interest.
S.5 Incentive Mechanisms and Applicable Fees Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5	The Polkadot network employs a Nominated Proof-of-Stake (NPoS) consensus mechanism to incentivize network participation and ensure protocol security. Validators, who produce blocks and validate transactions, are rewarded in DOT tokens through inflationary rewards and a share of transaction fees, while nominators—token holders who delegate their stake to validators—receive a portion of these rewards based on performance. To discourage malicious behavior, slashing penalties are imposed on validators and nominators in the event of security breaches or prolonged inactivity. Transaction fees on the network are calculated using a weight-based model that includes a base fee, a fee based on the computational weight of the transaction, and an additional charge based on the transaction's byte size. These fees are dynamically adjusted via a congestion multiplier that responds to network demand, thereby maintaining throughput efficiency and minimizing spam. A portion of collected fees is allocated to the Polkadot Treasury, which funds ecosystem development and governance initiatives. Furthermore, projects seeking to secure a parachain slot must participate in auctions by locking DOT, either through self-bonding or crowdloan contributions from supporters, who may in turn receive rewards from the project. All fee structures and incentives are decentralized and embedded in the protocol logic, ensuring fair distribution without centralized issuer control. This transparent and adaptive economic model supports the network's scalability, security, and decentralization objectives in line with MiCAR disclosure requirements.
S.6 Beginning of the period to which the disclosure relates	2024-03-06

S.7 End of the period to which the disclosure relates	2025-03-06
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	630791.66787 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

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 tCO2e per year
S.13 Scope 2 DLT GHG emissions – Purchased Scope 2 GHG emissions, expressed in tCO2e per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	1873.14310 tCO2e/a
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.