

**Portal To Bitcoin (PTB) White
paper**

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

N	Field	Content
0	Table of content	Table of content 2 Date of notification 6 Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114 7 Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114 7 Statement in accordance with Article 6(5), points (a), (b), (c) of Regulation (EU) 2023/1114 7 Statement in accordance with Article 6(5), point (d) of Regulation (EU) 2023/1114 7 Statement in accordance with Article 6(5), points (e) and (f) of Regulation (EU) 2023/1114 7 Summary 7 Warning in accordance with Article 6(7), second subparagraph of Regulation (EU) 2023/1114 7 Characteristics of the crypto-asset 9 Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability 11 Key information about the offer to the public or admission to trading 12 Part A - Information about the offeror or the person seeking admission to trading 12 Name 12 Legal form 12 Registered address 12 Head office 12 Registration Date 12 Legal entity identifier 12 Another identifier required pursuant to applicable national law 12 Contact telephone number 12 E-mail address 12 Response Time (Days) 13 Parent Company 13 Members of the Management body 13 Business Activity 13 Parent Company Business Activity 13 Newly Established 13 Financial condition for the past three years 13 Financial condition since registration 13 Part B – Information about the issuer, if different from the offeror or person seeking admission to trading 14 Issuer different from offeror or person seeking admission to trading 14 Name 14

	Legal Form	14
	Registered Address	14
	Head Office	14
	Registration Date	14
	Legal Entity Identifier	15
	Another identifier required pursuant to applicable national law	15
	Parent company	15
	Members of the management body	15
	Business activity	15
	Parent company business activity	15
	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	15
	Name	16
	Legal form	16
	Registered address	16
	Head office	16
	Registration date	16
	Legal entity identifier	16
	Another identifier required pursuant to applicable national law	16
	Part D - Information about the crypto-asset project	16
	Crypto-asset project name	17
	Crypto-assets name	17
	Abbreviation	17
	Crypto-asset project description	17
	Details of all natural or legal persons involved in the implementation of the crypto-asset project	18
	Utility Token Classification	18
	Key Features of Goods/Services for Utility Token Projects	18
	Plans for the token	18
	Resource Allocation	19
	Planned Use of Collected Funds or Crypto-Assets	19
	Part E - Information about the offer to the public of crypto-assets or their admission to trading	19
	Public Offering or Admission to trading	19
	Reasons for Public Offer or Admission to trading	19
	Fundraising Target	20
	Minimum Subscription Goals	20
	Maximum Subscription Goal	20
	Oversubscription Acceptance	20
	Oversubscription Allocation	20
	Issue Price	20

	Official currency or other crypto-assets determining the issue price	20
	Subscription fee	20
	Offer Price Determination Method	20
	Total Number of Offered/Traded crypto-assets	20
	Targeted Holders	20
	Holder restrictions	20
	Reimbursement Notice	21
	Refund Mechanism	21
	Refund Timeline	21
	Offer Phases	21
	Early Purchase Discount	21
	Time-limited offer	21
	Subscription period beginning	21
	Subscription period end	21
	Safeguarding Arrangements for Offered Funds/crypto-assets	21
	Payment Methods for crypto-asset Purchase	21
	Value Transfer Methods for Reimbursement	21
	Right of Withdrawal	21
	Transfer of Purchased crypto-assets	21
	Transfer Time Schedule	22
	Purchaser's Technical Requirements	22
	Crypto-asset service provider (CASP) name	22
	CASP identifier	22
	Placement form	22
	Trading Platforms name	22
	Trading Platforms Market Identifier Code (MIC)	22
	Trading Platforms Access	22
	Involved costs	23
	Offer Expenses	23
	Conflicts of Interest	23
	Applicable law	23
	Competent court	23
	Part F - Information about the crypto-assets	23
	Crypto-Asset Type	23
	Crypto-Asset Functionality	24
	Planned Application of Functionalities	24
	Type of white paper	24
	The type of submission	24
	Crypto-Asset Characteristics	24
	Commercial name or trading name	25
	Website of the issuer	25
	Starting date of offer to the public or admission to trading	25

	Publication date	25
	Any other services provided by the issuer	25
	Language or languages of the white paper	25
	Digital Token Identifier	25
	Functionally Fungible Group Digital Token Identifier	25
	Voluntary data flag	25
	Personal data flag	25
	LEI eligibility	26
	Home Member State	26
	Host Member States	26
	Part G - Information on the rights and obligations attached to the crypto-assets	26
	Purchaser Rights and Obligations	26
	Exercise of Rights and obligations	27
	Conditions for modifications of rights and obligations	27
	Future Public Offers	27
	Issuer Retained Crypto-Assets	27
	Utility Token Classification	29
	Key Features of Goods/Services of Utility Tokens	29
	Utility Tokens Redemption	29
	Non-Trading request	29
	Crypto-Assets purchase or sale modalities	29
	Crypto-Assets Transfer Restrictions	29
	Supply Adjustment Protocols	30
	Supply Adjustment Mechanisms	30
	Token Value Protection Schemes	30
	Token Value Protection Schemes Description	30
	Compensation Schemes	30
	Compensation Schemes Description	30
	Applicable law	30
	Competent court	31
	Part H – information on the underlying technology	31
	Distributed ledger technology	31
	Protocols and technical standards	31
	Technology Used	32
	Consensus Mechanism	32
	Incentive Mechanisms and Applicable Fees	32
	Use of Distributed Ledger Technology	32
	DLT Functionality Description	33
	Audit	33
	Audit outcome	33
	Part I – Information on risks	35

		Offer-Related Risks	35
		Issuer-Related Risks	35
		Crypto-Assets-related Risks	36
		Project Implementation-Related Risks	39
		Technology-Related Risks	41
		Mitigation measures	43
		J – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts	44
		J.1	44
		Adverse impacts on climate and other environment-related adverse impacts	44
		APPENDIX	45
		TABLE 1: MANDATORY INFORMATION ON PRINCIPAL ADVERSE IMPACTS ON THE CLIMATE AND OTHER ENVIRONMENTAL RELATED ADVERSE IMPACTS OF THE CONSENSUS MECHANISM	45
		Name	45
		Relevant legal entity identifier	45
		Name of the crypto-asset	45
		Consensus Mechanism	45
		Incentive Mechanisms and Applicable fees	45
		Beginning of the period to which disclosure relates	45
		End of the period to which the disclosure relates	45
		Energy consumption	46
		Energy consumption sources and methodologies	46

01	Date of notification	2025-10-16
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02	Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114	This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The person seeking admission to trading of the crypto-asset, this being Chain Cross Ltd (CCL), is solely responsible for the content of this crypto-asset white paper.
		No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
03	Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114	This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 and, to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.
04	Statement in accordance with Article 6(5), points (a), (b), (c) of Regulation (EU) 2023/1114	The crypto-asset referred to in this white paper may lose its value in part or in full, may not always be transferable and may not be liquid.
05	Statement in accordance with Article 6(5), point (d) of Regulation (EU) 2023/1114	False
06	Statement in accordance with Article 6(5), points (e) and (f) of Regulation (EU) 2023/1114	The crypto-asset referred to in this white paper is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council. The crypto-asset referred to in this white paper is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.
07	Warning in accordance with Article 6(7), second subparagraph of Regulation (EU) 2023/1114	Warning This summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase this crypto-asset on the content of the crypto-asset white paper as a whole and not on the summary alone. The admission to trading of this crypto-asset does not constitute an offer or solicitation to purchase financial instruments and any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law, as relevant.

	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.
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08	Characteristics of the crypto-asset	1. The PortaltoBitcoin Token (the PTB Token) is a fungible crypto-asset issued on the Ethereum network based on the ERC-20 token standard with a total supply of 8,400,000,000 tokens. 2. The PTB Token is the utility token of the PortaltoBitcoin Network protocol (the Portal Network), which is primarily developed by Tides Network Inc (TNI), an affiliate of CCL, and overseen by the Portal Foundation. 3. At its heart, the Portal Network is a cross-chain decentralised exchange protocol that enables trustless atomic swaps in crypto-assets between different blockchain networks. 4. The Portal Network aims to address the limitations of existing solutions for cross-chain swaps by completely eliminating the role of a trusted intermediary custodian, which has proven empirically to be unsafe and to result in the loss of user funds. 5. By utilising smart contracts, known as Hashed Time-Locked Contracts (HTLCs) on each support blockchain network, Portal Network will facilitate atomic swaps that are either completed successfully or fail entirely, ensuring users never lose funds due to partial transactions without the need for an intermediary custodian. Cross-chain transactions are currently supported on Bitcoin, Ethereum, Solana, with support of additional blockchain networks expected in the future. Importantly, the Portal Network focuses on addressing Bitcoin's limited utility in decentralised finance markets, by enabling cross-chain swaps involving the Bitcoin Network while maintaining heightened security principles associated with it. 6. The Portal Network is intended to consist of several key components, as follows: (a) An Automated Dynamic Market Maker that coordinates liquidity amongst multiple blockchain network and enables the cross-chain swaps in crypto-assets (ADMM). (b) Atomic swap protocols for trustless trading through deployment of smart contracts, known as HTLCs on each support blockchain network. (c) The Portal Notary Chain for cross-chain transaction recording and validation using a CometBFT-powered proof-of-stake consensus mechanism to secure the network, produce blocks and validate transactions (the Portal Consensus Mechanism). (d) The validator set of the Portal Consensus Mechanism, which is limited to 42 slots which are reallocated every 30-day epoch based on a competitive bidding-based selection process. The bidding process takes place through staking of the PTB Token and the highest bidders are
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		awarded a validator slot. Validators participating in the Portal Consensus Mechanism utilise the PortalOS protocol. (e) Lite nodes, which operate with fewer responsibilities than full validators but remain integral to the decentralized structure. They assist in validating data, cross-checking transaction activity, and contributing to Portal Network operations. (f) A software development kit (SDK) which is used for interaction with the Portal Network. (g) A webapp built using the SDK called by Liquidex, which is used by liquidity providers supplying liquidity for swaps initiated by users. (h) A layer 3 integration built on top of Bitcoin's Lightning Network, and powered by the BitScaler technology, which enables cross-chain transactions in Bitcoin Network-native assets through the ADMM. 7. Further information on Portal Network can be found here: www.portaltobitcoin.com 8. The PTB Token, although issued as an ERC-20 token on Ethereum, will serve as the utility token of the Portal Network for validator coordination, liquidity incentives, and network participation, supporting the ecosystem's growth and decentralisation. 9. The PTB Token will have the following key characteristics: (a) The PTB Token adheres to the ERC-20 standard on the Ethereum Network. (b) The PTB Token will be used for staking by validators to bid for a validator slot and for participation in the Portal Consensus Mechanism. This is an integral part of the Portal Network in enabling cross-chain swaps in crypto-assets across different blockchain networks. (c) Validators are evenly rewarded with newly-issued PTB Tokens for their participation in the Portal Consensus Mechanism. Lite nodes participating in the Portal Network are also rewarded with newly-issued PTB Tokens for their participation. (d) Liquidity providers to the ADMM component of the Portal Network will be rewarded with newly-issued PTB Tokens for the provision of liquidity, as well as a portion of swaps fees generated by the ADMM. (e) The Portal Network also employs a buy-back and burning mechanism, through which half of the swap fees generated by the ADMM component of the Portal Network are used to buy back PTB Tokens in the open market and burn it. (f) Holders of the PTB Token will have voting rights in the decentralised governance process of the Portal Network. In this way, holders of the
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		PTB Token are able to propose and vote on network upgrades, changes, and community initiatives, ensuring a decentralised governance structure. (g) Holders of the PTB Token will be able to pay fees for cross-chain swaps using the ADMM component of the Portal Network, as well as accessing other services associated with the Portal Network, such as the AI Copilot feature. 10. CCL does not undertake any obligation towards holders of the PTB Token, by way of contract or otherwise and holding of the PTB Token does not confer any rights or entitlements as against PTB or any other person, including, but not limited to, any rights to equity, ownership, dividends, profit-sharing, payments, voting rights, decision-making rights, participation in revenue or profits or entitlement to any liquidation surplus. 11. Neither CCL nor, to the best of CCL's knowledge, any other person purports to maintain a stable value for the PTB Token by referencing an official currency or another value or right or a combination thereof, including one or more official currencies. The PTB Token qualifies as a crypto-asset, other than an electronic money token or an asset-referenced token, for the purposes of Regulation (EU) 2023/1114. 12. Prospective holders of the PTB Token are encouraged to read the entirety of this crypto-asset whitepaper before acquiring any PTB Tokens, including, importantly, section I of this crypto-asset whitepaper which contains information as to relevant risks.
09	Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability	The PTB Token provides users with: 1. Access to participation in the bidding process for a validator slot and the validation activities related to the Portal Consensus Mechanism. 2. Payment of fees for cross-chain swaps using the ADMM component of the Portal Network, as well as accessing other services associated with the Portal Network, such as the AI Copilot feature. 3. Access to providing governance proposal submission and voting on matters relating to the Portal Network. 4. Access to providing liquidity for the ADMM component of the Portal Network. The Ethereum network, on which the PTB Tokens are issued, is a permissionless network. In technical terms, once a PTB Token is held by a third party, CCL and / or the Portal Foundation is unable to impose any restrictions on the transferability of such PTB Token. Where PTB Tokens are staked by validators in connection with their participation in the Portal Consensus Mechanism (either for bidding in auctions or securing

		an active validator slot), such PTB Tokens cannot be transferred or withdrawn. Likewise, when liquidity providers provide liquidity in the form of PTB Tokens in the context of the ADMM component of the Portal Network, such PTB Tokens cannot be transferred or withdrawn. The crypto-assets may be subject to such restrictions on transferability required by applicable law, including any applicable anti-money laundering, sanctions and restrictive measures or criminal law regimes, as implemented by the trading platform or any other person which is required to implement such restrictions. Separately, the trading platform or any other person may apply internal policies which have the effect of restricting the transferability of the PTB Token.
10	Key information about the offer to the public or admission to trading	CCL seeks the admission of the PTB Token to trading on the trading platform operated by Payward Global Solutions Limited, which is trading as “Kraken” and is licensed as a crypto-asset service provider with the Central Bank of Ireland with registration number C559106.

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

NB This crypto-asset white paper has been drawn by Chain Cross Ltd, as a person seeking the admission of the PTB Token to trading and as the issuer of the PTB Token. No offer of crypto-assets to the public is currently being undertaken by CCL in connection with this crypto-asset whitepaper. This crypto-asset whitepaper has not been prepared by the operator of a trading platform.

A.1	Name	Chain Cross LTD (CCL)
A.2	Legal form	CCL is a company limited by shares incorporated under the laws of the British Virgin Islands (the BVI). This type of entity corresponds to code 6EH6 under ISO standard 20275 ‘Financial Services – Entity Legal Forms (ELF)’.
A.3	Registered address	Craigmuir Chambers, Road Town, Tortola, VG 1110, British Virgin Islands.
A.4	Head office	CCL does not maintain a head office which is different than its registered office specified in A.3 above.
A.5	Registration Date	CCL was incorporated on 22 April 2025.
A.6	Legal entity identifier	CCL does not currently have a legal entity identifier number.
A.7	Another identifier required pursuant to applicable national law	CCL’s company number issued by the Registrar of Corporate Affairs of the BVI is 2146905.
A.8	Contact telephone number	+1 345 3243516
A.9	E-mail address	piano@horizonsglobal.io

A.10	Response Time (Days)	20			
A.11	Parent Company	Portal Foundation			
A.12	Members of the Management body	<table border="1"> <tr> <td>Marc Piano</td><td>43 Bimini Drive #87, George Town, Grand Cayman, Cayman Islands</td><td>Director</td></tr> </table>	Marc Piano	43 Bimini Drive #87, George Town, Grand Cayman, Cayman Islands	Director
Marc Piano	43 Bimini Drive #87, George Town, Grand Cayman, Cayman Islands	Director			
A.13	Business Activity	CCL is a BVI-incorporated company that will act as the issuing vehicle for the PTB Token and undertake other services related to the issuance of the PTB Token, such as engaging with trading platforms for the listing of the PTB Token and distributing the PTB Token as part of an airdrop to Portal Network participants.			
A.14	Parent Company Business Activity	The Portal Foundation develops strategic governance, network adoption, and ecosystem development for the Portal Network. Its principal activity is supporting the development of Portal Network's BitScaler technology, facilitating decentralized governance transition, and funding ecosystem growth. Its primary market includes the global Bitcoin and DeFi community seeking secure, custody-less cross-chain functionality.			
A.15	Newly Established	True. CCL, i.e. the person seeking admission of the PTB Token to trading, was incorporated on 22 April 2025.			
A.16	Financial condition for the past three years	N/A			
A.17	Financial condition since registration	As at the date of this crypto-asset whitepaper, CCL has not had any significant financial activity and does not have any significant assets or liabilities, noting that it was incorporated on 22 April 2025.			

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	Not applicable
B.2	Name	Not applicable
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

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	Not applicable
C.2	Legal form	Not applicable
C.3	Registered address	Not applicable
C.4	Head office	Not applicable
C.5	Registration date	Not applicable
C.6	Legal entity identifier	Not applicable
C.7	Another identifier required pursuant to applicable national law	Not applicable
Part D - Information about the crypto-asset project		

D.1	Crypto-asset project name	PortaltoBitcoin (PTB)
D.2	Crypto-assets name	PortaltoBitcoin (PTB Token)
D.3	Abbreviation	PTB
D.4	Crypto-asset project description	1. At its heart, the Portal Network is a cross-chain decentralised exchange protocol that enables trustless atomic swaps in crypto-assets between different blockchain networks. 2. The Portal Network aims to address the limitations of existing solutions for cross-chain swaps by completely eliminating the role of a trusted intermediary custodian, which has proven empirically to be unsafe and to result in the loss of user funds. 3. By utilising smart contracts, known as Hashed Time-Locked Contracts (HTLCs) on each support blockchain network, Portal Network will facilitate atomic swaps that are either completed successfully or fail entirely, ensuring users never lose funds due to partial transactions without the need for an intermediary custodian. Cross-chain transactions are currently supported on Bitcoin, Ethereum, Solana, with support of additional blockchain networks expected in the future. Importantly, the Portal Network focuses on addressing Bitcoin's limited utility in decentralised finance markets, by enabling cross-chain swaps involving the Bitcoin Network while maintaining heightened security principles associated with it. 4. The Portal Network is intended to consist of several key components, as follows: (a) An Automated Dynamic Market Maker that coordinates liquidity amongst multiple blockchain network and enables the cross-chain swaps in crypto-assets (ADMM). (b) Atomic swap protocols for trustless trading through deployment of smart contracts, known as HTLCs on each support blockchain network. (c) The Portal Notary Chain for cross-chain transaction recording and validation using a CometBFT-powered proof-of-stake consensus mechanism to secure the network, produce blocks and validate transactions (the Portal Consensus Mechanism). (d) The validator set of the Portal Consensus Mechanism, which is limited to 42 slots which are reallocated every 30-day epoch based on a competitive bidding-based selection process. The bidding process takes place through staking of the PTB Token and the highest bidders are

		awarded a validator slot. Validators participating in the Portal Consensus Mechanism utilise the PortalOS protocol. (e) Lite nodes, which operate with fewer responsibilities than full validators but remain integral to the decentralized structure. They assist in validating data, cross-checking transaction activity, and contributing to Portal Network operations. (f) A software development kit (SDK) which is used for interaction with the Portal Network. (g) A webapp built using the SDK called by Liquidex, which is used by liquidity providers supplying liquidity for swaps initiated by users. (h) A layer 3 integration built on top of Bitcoin's Lightning Network, and powered by the BitScaler technology, which enables cross-chain transactions in Bitcoin Network-native assets through the ADMM. 5. Further information on Portal Network can be found here: www.portaltobitcoin.com												
D.5	Details of all natural or legal persons involved in the implementation of the crypto-asset project	<table border="1"> <tr> <td>Chain Cross LTD</td><td>Administration</td><td>Craigmuir Chambers, Road Town, Tortola, VG 1110, British Virgin Islands.</td></tr> <tr> <td>Tides.Network, Inc.</td><td>Development</td><td>2443 Fillmore St, #380-8884 San Francisco, CA 94115</td></tr> <tr> <td>Portal Foundation</td><td>Administration</td><td>Harneys Fiduciary (Cayman) Limited, 4th Floor, Harbour Place, P.O. Box 10240, Grand Cayman KY1-1002, Cayman Islands</td></tr> <tr> <td>Harneys</td><td>Legal</td><td>Aristodemou Loizides Yiolitis LLC (Harneys Cyprus), Omrania Centre 313, 28th October Avenue, Limassol, 3105, Cyprus</td></tr> </table>	Chain Cross LTD	Administration	Craigmuir Chambers, Road Town, Tortola, VG 1110, British Virgin Islands.	Tides.Network, Inc.	Development	2443 Fillmore St, #380-8884 San Francisco, CA 94115	Portal Foundation	Administration	Harneys Fiduciary (Cayman) Limited, 4th Floor, Harbour Place, P.O. Box 10240, Grand Cayman KY1-1002, Cayman Islands	Harneys	Legal	Aristodemou Loizides Yiolitis LLC (Harneys Cyprus), Omrania Centre 313, 28th October Avenue, Limassol, 3105, Cyprus
Chain Cross LTD	Administration	Craigmuir Chambers, Road Town, Tortola, VG 1110, British Virgin Islands.												
Tides.Network, Inc.	Development	2443 Fillmore St, #380-8884 San Francisco, CA 94115												
Portal Foundation	Administration	Harneys Fiduciary (Cayman) Limited, 4th Floor, Harbour Place, P.O. Box 10240, Grand Cayman KY1-1002, Cayman Islands												
Harneys	Legal	Aristodemou Loizides Yiolitis LLC (Harneys Cyprus), Omrania Centre 313, 28th October Avenue, Limassol, 3105, Cyprus												
D.6	Utility Token Classification	False												
D.7	Key Features of Goods/Services for Utility Token Projects	Not Applicable, PTB is not a utility token as defined under Regulation (EU) 2023/1114, but would qualify as a crypto-asset, other than an electronic money token or an asset-referenced token.												
D.8	Plans for the token	Portal Network's development follows a structured roadmap focused on												

		expanding cross-chain capabilities and network adoption: Past Milestones include: • Development of atomic swap protocols for Bitcoin and Ethereum interoperability and protocol development (2019); • BitScaler whitepaper publication; and • Aurelia Public Testnet launch with 18M+ transactions. Future milestones include: • Token Generation Event; • Mainnet launch with full BitScaler implementation; • Portal ADMM launch enabling native cross chain trading; • Listings of the PTB Token on non-EU exchanges, such as Bitget; • Ecosystem expansion with perpetual trading, stablecoins, and real-world asset tokenization, always subject to requirements under applicable law and regulations.
D.9	Resource Allocation	Not applicable.
D.10	Planned Use of Collected Funds or Crypto-Assets	Not applicable, as no offer of crypto-assets to the public is currently being undertaken by CCL in connection with this crypto-asset whitepaper. CCL currently only seeks the admission of the PTB Token to trading.
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. This crypto-asset white paper concerns an admission of a crypto-asset to trading.
E.2	Reasons for Public Offer or Admission to trading	The admission of the PTB Token to trading aims to increase its liquidity and accessibly to users of the relevant trading platforms. This is expected to have the following advantages: (a) Enhanced access to PTB Token will empower users to not have to trust untrustworthy, custodial solutions and secure their right to the cryptocurrencies they own and not lose their funds repeatedly, as has happened numerous times since the emergence of the crypto-asset space. (b) The admission of the PTB Token to trading will increase the visibility of the Portal Network as a whole and is expected to result in the growth of the Portal Network and increased adoption and liquidity in the ADMM component of the Portal Network. (c) Increased accessibility of the PTB Token will aid the decentralization of Portal Network's governance. (d) The admission of the PTB Token to trading will provide its users with transparency on market data relating to it.

E.3	Fundraising Target	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.4	Minimum Subscription Goals	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.5	Maximum Subscription Goal	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.6	Oversubscription Acceptance	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.7	Oversubscription Allocation	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.8	Issue Price	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.9	Official currency or other crypto-assets determining the issue price	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.10	Subscription fee	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.11	Offer Price Determination Method	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.12	Total Number of Offered/Traded crypto-assets	The total supply of the PTB Token is capped at 8,400,000,000 tokens. At the token generation event, 390,809,000 PTB Tokens will enter circulation (approximately 4.7% of the total supply). Further information as to the relevant token allocation and expected schedule for the PTB Token's circulating supply can be found in field G.5 of this crypto-asset whitepaper.
E.13	Targeted Holders	ALL. The prospective holders targeted by the admission of the PTB Token to trading include both professional and retail investors.
E.14	Holder restrictions	The Ethereum network, on which the PTB Tokens are issued, is a permissionless network. In technical terms, once a PTB Token is held by a third party, CCL and / or the Portal Foundation is unable to impose any restrictions on the transferability of such PTB Token. Where PTB Tokens are staked by validators in connection with their participation in the Portal Consensus Mechanism (either for bidding in auctions or securing an active validator slot), such PTB Tokens cannot be transferred or withdrawn.

		Likewise, when liquidity providers provide liquidity in the form of PTB Tokens in the context of the ADMM component of the Portal Network, such PTB Tokens cannot be transferred or withdrawn. The crypto-assets may be subject to such restrictions on transferability required by applicable law, including any applicable anti-money laundering, sanctions and restrictive measures or criminal law regimes, as implemented by the trading platform or any other person which is required to implement such restrictions. Separately, the trading platform or any other person may apply internal policies which have the effect of restricting the transferability of the PTB Token.
E.15	Reimbursement Notice	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.16	Refund Mechanism	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.17	Refund Timeline	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.18	Offer Phases	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.19	Early Purchase Discount	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.20	Time-limited offer	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.21	Subscription period beginning	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.22	Subscription period end	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.23	Safeguarding Arrangements for Offered Funds/crypto-assets	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.24	Payment Methods for crypto-asset Purchase	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.25	Value Transfer Methods for Reimbursement	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.26	Right of Withdrawal	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.27	Transfer of Purchased crypto-assets	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.

E.28	Transfer Time Schedule	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.29	Purchaser's Technical Requirements	Holders of the PTB Token must comply with at least the following technical requirements in order to hold the PTB Token: (a) Access to an internet connection; (b) Account with the trading platform, where the trading platform also provides custody services to the holder of the PTB Token; (c) Account with a crypto-asset service provider, where such crypto-asset service provider provides custody services to the holder of the PTB Token; (d) A non-custodial wallet which supports ERC-20 tokens on the Ethereum network, where the PTB Token Tokens are held on a self-custody basis; and (e) A device capable of permitting the holder of the PTB Token to manage their account / non-custodial wallet (as applicable). For the avoidance of doubt, no offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.30	Crypto-asset service provider (CASP) name	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.31	CASP identifier	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.32	Placement form	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.33	Trading Platforms name	Kraken
E.34	Trading Platforms Market Identifier Code (MIC)	PGTP
E.35	Trading Platforms Access	The requirements for accessing a trading platform are set by the operator of the trading platform from time to time and may be subject to change. As at the date of this crypto-asset whitepaper, CCL understands that Kraken trading platform applies the following requirements for users to obtain access to it and trade the PTB Token: 1. Account Creation ○ Visit kraken.com and register ○ Complete identity verification (KYC) 2. Deposit Funds ○ Use bank card, crypto transfer, or third-party providers ○ Search for PTB/USDT trading pair 3. Purchase PTB

		○ Place a market or limit order ○ Withdraw to a self-custody wallet if preferred For the avoidance of doubt, CCL has no control over the requirements for accessing a trading platform.
E.36	Involved costs	Fees incurred through the use of a trading platform are set by the operator of the trading platform from time to time and may be subject to change. As at the date of this crypto-asset whitepaper, the fees charged in relation to use of the Kraken trading platform can be found at https://www.kraken.com/features/fee-schedule. For the avoidance of doubt, CCL has no control over the trading fees a user may incur through the use of a trading platform.
E.37	Offer Expenses	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset whitepaper.
E.38	Conflicts of Interest	Not applicable.
E.39	Applicable law	The law applicable with respect to matters concerning the PTB Token will depend on the nature of the matter at hand and may include, but is not limited to: (a) Irish law, this being the jurisdiction in which the PTB Token will be admitted to trading; (b) the laws chosen in, or otherwise applicable to, any agreement in relation to the PTB Token; and (c) the laws of the British Virgin Islands, this being the jurisdiction in which CCL is established.
E.40	Competent court	The competent court with jurisdiction to adjudicate any claim and / or proceedings in relation to the admission of PTB Token to trading will depend on the nature of the claim / type of proceedings brought by the parties in each case and may include, but is not limited to: (a) the competent courts of the Republic of Ireland, this being the jurisdiction in which the PTB Token will be admitted to trading; (b) the competent courts chosen in, or which otherwise have jurisdiction to adjudicate any disputes arising from, any agreement in relation to the admission of the PTB Token to trading; and (c) the competent courts of the British Virgin Islands, this being the jurisdiction in which CCL is established.
Part F - Information about the crypto-assets		
F.1	Crypto-Asset Type	The crypto-asset which CCL seeks to admit to trading, i.e. the PTB Token,

		qualifies as a crypto-asset other than an asset-referenced tokens or e-money token for the purposes of Regulation (EU) 2023/1114.
F.2	Crypto-Asset Functionality	The PTB Token will serve as the utility token of the Portal Network for validator coordination, liquidity incentives, and network participation, supporting the ecosystem's growth and decentralisation.
F.3	Planned Application of Functionalities	PTB Token functionalities will be implemented across several phases: Phase 1: Validator staking and network coordination for atomic swap operations Phase 2: Liquidity provider incentives and ADMM participation rewards Phase 3: Cross-chain fee payment and transaction facilitation Phase 4: Ecosystem governance and development funding mechanisms Phase 5: Advanced features including cross-chain composability and protocol integrations Implementation timelines depend on network development progress, validator adoption, and regulatory considerations across supported jurisdictions. All planned functionalities maintain Portal Network's commitment to decentralization, trustless operations, and atomic swap infrastructure
F.4	Type of crypto-asset white paper	OTHR. This crypto-asset white paper relates to the PTB Token, which qualifies as a crypto-asset other than an asset-referenced tokens or e-money token for the purposes of Regulation (EU) 2023/1114.
F.5	The type of submission	NEWT. This crypto-asset white paper constitutes a new crypto-asset white paper, which is submitted to the competent authority of CCL's home Member State for the first time.
F.6	Crypto-Asset Characteristics	The PTB Token will have the following key characteristics: (a) The PTB Token adheres to the ERC-20 standard on the Ethereum Network. (b) The PTB Token will be used for staking by validators to bid for a validator slot and for participation in the Portal Consensus Mechanism. This is an integral part of the Portal Network in enabling cross-chain swaps in crypto-assets across different blockchain networks. (c) Validators are evenly rewarded with newly-issued PTB Tokens for their participation in the Portal Consensus Mechanism. Lite nodes participating in the Portal Network are also rewarded with newly-issued PTB Tokens for their participation.

		(d) Liquidity providers to the ADMM component of the Portal Network will be rewarded with newly-issued PTB Tokens for the provision of liquidity, as well as a portion of swaps fees generated by the ADMM. (e) The Portal Network also employs a buy-back and burning mechanism, through which half of the swap fees generated by the ADMM component of the Portal Network are used to buy back PTB Tokens in the open market and burn it. (f) Holders of the PTB Token will have voting rights in the decentralised governance process of the Portal Network. In this way, holders of the PTB Token are able to propose and vote on network upgrades, changes, and community initiatives, ensuring a decentralised governance structure. (g) Holders of the PTB Token will be able to pay fees for cross-chain swaps using the ADMM component of the Portal Network, as well as accessing other services associated with the Portal Network, such as the AI Copilot feature.
F.7	Commercial name or trading name	PortaltoBitcoin
F.8	Website of the issuer	https://portaltobitcoin.com/
F.9	Starting date of offer to the public or admission to trading	2025-11-15
F.10	Publication date	2025-11-14
F.11	Any other services provided by the issuer	False
F.12	Language or languages of the white paper	This crypto-asset whitepaper has been prepared in the English language only.
F.13	Digital Token Identifier	No digital token identifier code has been issued in respect of the PTB Token to date.
F.14	Functionally Fungible Group Digital Token Identifier	The PTB Token does not belong to a functionally fungible group for the purposes of the standard ISO 24165.
F.15	Voluntary data flag	False. The preparation of this crypto-asset whitepaper is mandatory for CCL, as a person seeking the admission of the PTB Token to trading, under Article 5(1)(b) of Regulation (EU) 2023/1114.
F.16	Personal data flag	True. This whitepaper contains personal data within the meaning of Regulation (EU) 2016/679 (General Data Protection Regulation).

F.17	LEI eligibility	True. To the best of CCL's knowledge, it is not subject to any restrictions in terms of its eligibility to obtain a legal entity identifier (LEI) code.
F.18	Home Member State	The Republic of Ireland. CCL's home Member State for the purposes of Regulation (EU) 2023/1114 is the Republic of Ireland, as: (a) CCL is an entity established in a third country and has no branch in the European Union; and (b) the European Union Member State in which the first application for admission of the PTB Token to trading is made is the Republic of Ireland, i.e. to the "Kraken" trading platform operated by Payward Global Solutions Limited and which is established in the Republic of Ireland.
F.19	Host Member States	There are no host Member States within the meaning of Regulation (EU) 2023/1114, as relevant to CCL. This is on the basis that, currently, CCL only seeks the admission of PTB Token to trading in its home Member State, i.e. the Republic of Ireland.

Part G - Information on the rights and obligations attached to the crypto-assets

G.1	Purchaser Rights and Obligations	- Other than the rights conferred in the form of the technical characteristics of the PTB Token itself (see section F.6 above for further details), PTB Tokens do not confer any rights or entitlements to their holders. - In particular, CCL does not undertake any obligation towards holders of the PTB Token, by way of contract or otherwise and holders of the PTB Token do not confer any rights or entitlements as against CCL or any other person, including, but not limited to, any rights to equity, ownership, dividends, profit-sharing, payments, voting rights, decision-making rights, participation in revenue or profits or entitlement to any liquidation surplus. - Holders of the PTB Token acknowledge that transactions involving the PTB Token on the Ethereum network are irreversible. CCL bears no responsibility to track, verify or determine ownership of PTB Tokens. Once PTB Tokens are transferred to a specific address on the Ethereum network, the holders transferring such PTB Tokens accept the possibility of permanently losing access or claims to them. This may occur due to reasons, such as, but not limited to: - incorrect address entry, making it impossible to identify the recipient; - loss or lack of access to the private key associated with that address; or - transfer to an address associated with an entity requiring identity verification or other actions before returning the tokens.
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		4. To the maximum extent permitted by applicable law, CCL makes no warranty with respect to the PTB Tokens, including any: (a) warranty of merchantability; (b) warranty of fitness for a particular purpose; (c) warranty of title; or (d) warranty against infringement of intellectual property rights of a third party, each whether arising by law, course of dealing, course of performance, usage of trade, or otherwise. 5. By holding, using, or accessing PTB Tokens, holders represent and warrant that: (a) They comply with the terms outlined in this white paper and applicable law. (b) They are at least 18 years of age and that they do not hold PTB Tokens on behalf of, or for the benefit of, a minor. (c) The PTB Tokens will not be used for any unlawful activities of any kind, including, but not limited to, money laundering activities, fraud, extortion, corruption, bribery, ransomware, terrorist financing, violent activities, market abuse, breach or circumvention of applicable sanctions and restrictive measures regimes.
G.2	Exercise of Rights and obligations	Not applicable. Please refer to section G.1 above.
G.3	Conditions for modifications of rights and obligations	As set out in Article 12 of Regulation (EU) 2023/1114, in the event of a significant new factor, material mistake, or material inaccuracy that is capable of affecting the assessment of the crypto-assets, CCL will modify this crypto-asset white paper, notify the modified crypto-asset white paper to the competent authority and publish it on its website.
G.4	Future Public Offers	No future offers of the PTB Token to the public are currently anticipated.
G.5	Issuer Retained Crypto-Assets	Not applicable. CCL will not retain any crypto-assets. The allocation of PTB Token as of the token generation event (the TGE) will be as follows:

Category	% Allocation	# Tokens	Lock/Cliff Period Months	Vesting After Cliff (Months)
Early Contributors (Investors with Redeemed Tokens)	4.92%	413,087,932	6	9
Tides.Network, Inc.	24.84%	2,086,912,068	12	36
Portal Foundation Treasury	7.43%	624,120,000	0	60
Liquidity	4.00%	336,000,000	0	0
Validator Rewards	11.22%	942,480,000	0	120
LP Rewards	24.31%	2,042,040,000	0	120
Lite Nodes Rewards	1.87%	157,080,000	0	120
Ecosystem Development	10.69%	897,880,000	0	48
Community	10.72%	900,400,000	0	0
TOTAL	100.00%	8,400,000,000		

- **Early Contributors – 4.92%**

This allocation includes early investors who supported Portal Network in its most nascent stages, long before product-market fit or launch certainty. These stakeholders are granted 4.92% of the total supply, vested over 9 months following a 6-month cliff. The extended timeline underscores long-term commitment.

- **Tides.Network, Inc. — 24.84%**

This allocation includes both core team members and early investors who supported Portal Network in its most nascent stages, long before product-market fit or launch certainty. These stakeholders are granted 24.84% of the total supply, vested over 36 months following a 12-month cliff. The extended timeline underscores long-term commitment.

- **Portal Foundation Treasury — 7.43%**

The Portal Foundation is responsible for executing Portal Network's long-term strategy and covering operational needs. This includes funding research & development, infrastructure, grants, and community support. It receives 7.43% of the supply, vested over 60 months with a 1-month cliff.

- **Ecosystem Development — 10.7%**

To support growth and adoption, 10.7% of the supply is allocated to ecosystem development. This budget will mainly fund external incentives, strategic partnerships and marketing. Tokens are vested over 48 months.

- **Liquidity Provision — 4.0%**

To ensure healthy trading conditions on both decentralised exchanges and centralised exchanges, 4.0% of the supply is reserved for liquidity provisions. These tokens are vested linearly over 6 months, enabling efficient market access on both decentralised exchanges and centralised exchanges without flooding supply.

		• Community — 10.7% To reward our loyal community, Key Opinion Leaders, and advisors, 10.7% of the supply is allocated to an airdrop campaign. These tokens will unlock 100% at TGE. Eligibility criteria will be announced through Portal Network's official channels. • Emissions Schedule — 37.4% As highlighted, emissions play a key role in incentivizing the three core components of Portal. Each month, 26.18 million \$PTB are emitted over a 10-year period, distributed as follows: • 65% to Liquidity Providers • 30% to Validators • 5% to Lite Nodes
G.6	Utility Token Classification	False
G.7	Key Features of Goods/Services of Utility Tokens	Not Applicable as PTB is not a utility token as defined by Regulation (EU) 2023/1114.
G.8	Utility Tokens Redemption	Not Applicable as PTB is not a utility token as defined by Regulation (EU) 2023/1114 but would qualify as a crypto-asset, other than an electronic money token or an asset-referenced token.
G.9	Non-Trading request	True. An admission of the PTB Token to trading is sought in connection with this crypto-asset white paper.
G.10	Crypto-Assets purchase or sale modalities	Not applicable. An admission of the PTB Token to trading is sought in connection with this crypto-asset white paper.
G.11	Crypto-Assets Transfer Restrictions	The Ethereum network, on which the PTB Tokens are issued, is a permissionless network. In technical terms, once a PTB Token is held by a third party, CCL is unable to impose any restrictions on the transferability of such PTB Token. The crypto-assets may be subject to such restrictions on transferability required by applicable law, including any applicable anti-money laundering, sanctions and restrictive measures or criminal law regimes, as implemented by the trading platform or any other person which is required to implement such restrictions. Separately, the trading platform or any other person may apply internal policies which have the effect of restricting the transferability of the PTB Token.

G.12	Supply Adjustment Protocols	True
G.13	Supply Adjustment Mechanisms	Yes, the PTB Token has protocols for both minting (increase) and burning (decrease). Increase: New tokens are issued in a pre-specified, controlled manner, with the validators participating in the Portal Consensus Mechanism authorized to issue up to 1% of the total supply at the end of each 30-day epoch for rewarding validators, liquidity providers and lite nodes participating in the Portal Network. In total, 37.4% of the total supply of PTB Tokens (see field G.5 above) is expected to be issued in the context of such rewards over a 10-year period, beginning with the TGE. Decrease: A significant burning mechanism is in place. Half of the swap fees generated by ADMM component of the Portal Network are used to buy PTB Tokens from the open market and burn it. PTB Tokens are also burned as a result of slashing penalties imposed on misbehaving validators.
G.14	Token Value Protection Schemes	True
G.15	Token Value Protection Schemes Description	Portal Network incorporates several economic mechanisms to protect the value of the PTB Token: • Staking as Collateral: Requiring a substantial stake puts validator capital at risk, aligning their interests with the long-term health and value of the network and security of user funds. • Slashing Penalties: The burning of slashed tokens reduces supply and reinforces the token's value by punishing harmful behavior. • Fee Burning Mechanism: Continuously using 50% of swap fees generated by the ADMM component of the Portal Network to buy and burn PTB creates consistent demand and deflationary pressure, directly linking the token's value to network adoption and rewarding those that create value in the network.
G.16	Compensation Schemes	False. No compensation scheme is currently in place with respect to the PTB Token.
G.17	Compensation Schemes Description	Not applicable. Please refer to section G.16 above.
G.18	Applicable law	The law applicable with respect to matters concerning the PTB Token will depend on the nature of the matter at hand and may include, but is not limited to: (a) Irish law, this being the jurisdiction in which the PTB Token will be admitted to trading;

		(b) the laws chosen in, or otherwise applicable to, any agreement in relation to the PTB Token; and (c) the laws of the British Virgin Islands, this being the jurisdiction in which CCL is established.
G.19	Competent court	The competent court with jurisdiction to adjudicate any claim and / or proceedings in relation to the PTB Token to trading will depend on the nature of the claim / type of proceedings brought by the parties in each case and may include, but is not limited to: (a) the competent courts of the Republic of Ireland, this being the jurisdiction in which the PTB Token will be admitted to trading; (b) the competent courts chosen in, or which otherwise have jurisdiction to adjudicate any disputes arising from, any agreement in relation to the PTB Token; and (c) the competent courts of the British Virgin Islands, this being the jurisdiction in which CCL is established.
Part H – information on the underlying technology		
H.1	Distributed ledger technology	The PTB Token will be issued on the Ethereum Network based on ERC-20 token standard, with a total supply of 8,400,000,000 tokens. The Ethereum Network uses a Proof-of-Stake (PoS) consensus mechanism (the Ethereum Consensus Mechanism). Ethereum's native cryptocurrency, Ether (ETH), serves as the primary medium of exchange within the network. It is used to pay for transaction fees (gas), incentivize validators, and participate in governance and staking. For more details, visit Ethereum's official documentation and repositories: • Ethereum Foundation: https://ethereum.org/en/ • Ethereum Developer Resources: https://ethereum.org/en/developers/ • Ethereum GitHub Repositories: https://github.com/ethereum/ Further information as to the Portal Network can be found in field D.4 of this crypto-asset whitepaper.
H.2	Protocols and technical standards	The PTB Token will be issued on the Ethereum Network based on the ERC-20 standard. Further information as to the Portal Network can be found in field D.4 of this crypto-asset whitepaper.

H.3	Technology Used	The technology allowing the holding and transferring the PTB Token is based on the Ethereum network, as described in Part H of this crypto-asset white paper. Further information as to the Portal Network can be found in field D.4 of this crypto-asset whitepaper.
H.4	Consensus Mechanism	The POS Ethereum Consensus Mechanism, a system known as the Beacon Chain, coordinates the network by selecting validators who propose and validate new blocks containing transactions posted on the Ethereum Network. As at the date of writing, Ethereum has over 1 million validators. For more details, visit Ethereum’s official documentation and repositories: • Ethereum Foundation: https://ethereum.org/en/ • Ethereum Developer Resources: https://ethereum.org/en/developers/ • Ethereum GitHub Repositories: https://github.com/ethereum/ Portal Network uses a Proof-of-Stake (PoS) consensus mechanism on its Notary Chain. The underlying engine is CometBFT (formerly Tendermint), known for its Byzantine fault tolerance and fast finality. Block rewards are distributed evenly among all active validators. Further information as to the Portal Consensus Mechanism can be found in field D.4 of this crypto-asset whitepaper.
H.5	Incentive Mechanisms and Applicable Fees	Ethereum uses a gas fee system to assign a cost to computational tasks, such as processing transactions or executing smart contracts. These fees paid in ETH, compensate validators for their work and assist in regulating network activity. In addition, validators receive newly issued ETH for participating in the Ethereum network’s consensus mechanism. Participants must stake at least 32 ETH to become a validator. Validators who act maliciously or fail to perform their duties can lose part of their staked ETH, a mechanism known as “slashing”. For more details, visit Ethereum’s official documentation and repositories: • Ethereum Foundation: https://ethereum.org/en/ • Ethereum Developer Resources: https://ethereum.org/en/developers/ • Ethereum GitHub Repositories: https://github.com/ethereum/ Further information as to the incentive mechanisms and fees relevant to the Portal Network can be found in fields F.6, G.13 and G.15 of this crypto-asset whitepaper.
H.6	Use of Distributed Ledger Technology	False. The Ethereum Network is not operated by CCL or a third party acting on its behalf.

H.7	DLT Functionality Description	Not applicable. Please refer to H.6 above.
H.8	Audit	True
H.9	Audit outcome	Grey Swan conducted a comprehensive security audit of the Portal Network's core smart contracts on both the Portal Network and the Ethereum Network. The audit took place from June 23 to July 21, 2025, focusing on the code at commit 816e32a. The Portal Network is a Cosmos-based zone designed for atomic cross-chain asset swaps. It allows users to bridge assets into a margin account and use an order book to execute swaps with counterparties, minimizing the required collateral. The system relies on key actors like a centralized Validator (initially the Portal team) and the Portal Foundation to manage the swap workflow, register assets, and control the release of funds from the bridge. <u>Overall Audit Findings</u> The audit identified a total of 15 issues and 12 considerations. The severity breakdown is as follows: • 1 Critical Issue • 1 High-Severity Issue • 3 Medium-Severity Issues • 10 Low-Severity Issues • 12 Considerations Grey Swan recommended that all critical and high-severity issues must be addressed before deployment, and medium/low issues should also be resolved to mitigate risks. Critical & High-Severity Issues 1. Critical: Overly Permissive Delegation Functions • Problem: The CustomERC6909 contract contained functions (setOperator and approve) that incorrectly allowed any user to grant themselves unlimited permission to transfer assets from <i>any other user's account</i>. This deviated from the ERC-6909 standard and posed a direct risk of asset theft. • Status: Fixed by the Portal team in a subsequent commit. 2. High: Invoice Manager Can Lock Funds

		• Problem: The Invoice Manager contract, which uses a Hash Time Lock Contract (HTLC) model for swaps, lacked a refund timelock for the first depositor. If the second party failed to complete their part of the swap, the first party's funds would be locked in the contract indefinitely. • Status: Partially Resolved. A timelock was added, but the Portal team is still working on implementing dynamic timelock adjustments based on network conditions to ensure correct timing between chains. Medium-Severity Issues The audit found three medium-severity issues, all of which have been fixed: • Assets on Unregistered Chain: The Asset Manager did not verify if a chain was enabled before registering an asset on it. • Receive Function Doesn't Deposit: The receive function in two contracts accepted Ether but did not credit the funds to the sender, leading to a potential loss of funds. • Power Accumulator Overflow: An unchecked calculation in the Portal Gateway could have allowed a small group of validators to manipulate the validator set by causing an integer overflow. Low-Severity Issues & Other Considerations The audit detailed 10 low-severity issues and 12 considerations, which primarily relate to code quality, best practices, and potential edge-case bugs. Key themes include: • Events and Errors: Missing event emissions for important state changes, events firing redundantly, and the use of generic, non-descriptive error messages. • Code Quality & Consistency: Inconsistent coding styles, floating pragma versions, missing security contacts in documentation, redundant code, and unnecessarily complex logic. • Potential Bugs: An incorrect logical comparison in an unused function and a potential failure when negating the minimum possible value of an int256. • Best Practices: Recommendations to use address.call for Ether transfers (with re-entrancy guards), implement namespace storage for upgradeable contracts, and be explicit with variable types (e.g., uint256 instead of uint).
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		Most low-severity issues were fixed. However, several issues and most of the "Considerations" were acknowledged by the Portal team and are planned to be addressed in a future iteration.
Part I – Information on risks		
I.1	Offer-Related Risks	Not applicable. No offer of crypto-assets to the public is undertaken by CCL in connection with this crypto-asset white paper.
I.2	Issuer-Related Risks	1. Financial Risks: CCL, as the issuer of the PTB Token, may be exposed to financial uncertainties, such as issues related to managing capital, maintaining liquidity and achieving profitability. Unexpected financial setbacks could hinder CCL's capacity to continue operations and adequately support the growth of the PTB Token. 2. Business Continuity Risks: CCL's business operations could be interrupted by various factors, such as unfavourable market conditions, economic downturns or major changes in blockchain and cryptocurrency industries. These disruptions may impact CCL's long-term sustainability. 3. Legal and Regulatory Risks: CCL is exposed to legal and regulatory risks. Taking into account that CCL is operating within the fast-evolving regulatory landscape around crypto assets, the introduction to new regulations and changes to existing regulations could give rise to legal and regulatory risks. Importantly, non-compliance with existing legal obligations, may hinder CCL's operational effectiveness and its support in relation to the PTB Token. Potential regulatory actions such as fines, penalties, or other enforcement measures could also impede the development of the PTB Token. 4. Third-Party Risks: CCL relies on third party providers such as partners, vendors, and service providers to manage essential operational functions. In addition, the PTB Token will be listed on a third-party trading platform. Such reliance on third parties gives rise to the risk of CCL being adversely impacted if any of these third parties fail to perform, face disruption, or non-compliance. In turn, this would affect service delivery and operational reliability. 5. Operational Risks: CCL may also face operational risks arising from unexpected events such as technological failures, cyber-attacks, or other external disruptions. Consequently, such events may disrupt the smooth operation of CCL and thereby affect its ability to provide ongoing support for

		the PTB Token, potentially affecting the timely delivery of the project. 6. Risk of enforcement: CCL operates in a new industry with a new legal framework. As such, CCL may face increased regulatory scrutiny, including investigations or enforcement actions. It is possible that competent authorities may target CCL and examine its operations further, which could lead to fines, penalties, settlements, judgements or operational changes. Such outcomes might harm CCL's reputation, raise costs and negatively affect the PTB Token's development. 7. Abandonment / Lack of Success Risk: CCL may face the risk that its activities may need to be partially or completely discontinued due to various factors. Such reasons may include, among others, a lack of public interest or funding, the unavailability of important developers and members of the project, unforeseen and unavoidable events (force majeure), including (including pandemics, wars or natural disasters), the absence of commercial viability or the lack of future growth potential. 8. Project Change Risk: The current project may change over time. Such changes may include shifts in strategic decision or execution methods. Influencing factors may include regulatory developments, market conditions, emerging technologies or internal decision making. Even though amendments can lead to progress and adaptability, they may also create uncertainty, potentially altering the project's goals and value and diverging from initial expectations. 9. No Portal Network Control Risk: The Portal Network protocol, as a decentralised construct, is neither operated nor controlled by the CCL. When a PTB Token holders interact with the Portal Network, they are engaging directly with the Portal Network and potentially with third parties that have no relationship to CCL. This means CCL does not oversee or manage these interactions, nor does it assume responsibility for any outcomes that may arise.
I.3	Crypto-Assets-related Risks	1. Intrinsic Value: PTB's value is derived solely from its utility within the network. It is not backed by physical assets or a government. 2. Custodial and Reimbursement Risk: Users are responsible for securing their own private keys. Loss of keys means permanent loss of tokens. When the PTB Token is stored with third-party custodians, users may face risks such as financial collapse of the custodian, cyberattacks or system

		malfunctions that could hinder access to their assets. Furthermore, while Regulation 2023/1114 outlines refund obligations, the effectiveness of these processes depends on proper implementation. Any delays, errors or technical complications could impact the speed and reliability of reimbursements. 3. Regulatory Risk: The legal and tax treatment of crypto-assets is uncertain and varies by jurisdiction, which could impact the token's usability and value. While Regulation (EU) 2023/1114 and similar efforts, aim to bring regulatory consistency within the EU, national authorities may still apply their own rules and interpretations. Amendments in legislation, tax policies or accounting practices could influence how the PTB Token is classified, its use and its exchangeability. In turn, PTB Token holders should thoroughly research and understand the legal and tax responsibilities applicable in their own jurisdictions, as failure to comply could lead to serious financial or legal consequences. 4. Market Volatility: The value of PTB is subject to significant price fluctuations common in crypto markets. Such fluctuations may be influenced by factors such as global economic shifts, regulatory amendments, speculative trading, and supply and demand imbalances. Such volatility can expose PTB Token holders to financial losses, due to limited regulatory oversight and the liquidity which can vary widely. 5. Adoption Risk: The token's value is directly tied to the success and usage of the Portal Network. Failure to attract sufficient users and liquidity could negatively impact its value. 6. Liquidity Risk: The ability to easily buy or sell PTB could be affected by market conditions or limited exchange listings. 7. Lack of Central Accountability: There is no single entity legally responsible for the project's success or for rectifying issues. 8. Governance Risk: Disagreements within the decentralized community of validators and developers could stall progress or lead to network splits. 9. Validator Centralization: If staking power becomes concentrated among a small number of entities, it could threaten the network's decentralization and adoption, but user custody their own funds.
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		10. Fraud and Scams Risk: The PTB Token operates within a decentralized ecosystem that can attract malicious actors due to its anonymity and lack of centralized oversight. A scam risk arises, as scammers may attempt to exploit users through deceptive methods such as fake platforms and communications designed to steal sensitive data such as wallet access keys. Furthermore, fraudulent promotions, such as misleading investment opportunities, may also be used to unlawfully acquire tokens or funds from individuals. As a result, PTB Token holders are strongly advised to remain cautious, verify all sources and interact solely with trusted and well-established sources. 11. Market Abuses Risk: Like many cryptocurrencies, the PTB token faces the risk of market manipulation. Practices such as pump-and-dump schemes, coordinated buying or selling, or other manipulative trading behaviours can artificially distort token prices, leading to erratic market movements that do not accurately reflect underlying value. Such market abuses can create a misleading trading environment, posing significant financial risks to both novice and experienced investors alike. 12. Anti-Money Laundering (AML) and Counter-Terrorism Financing (CTF) Risk: Jurisdictions have implemented AML and CFT legislation to monitor and restrict the movement of funds for unlawful purposes. The use of crypto-assets by criminal entities / bad actors would constitute a violation of such regulatory measures. The AML / CTF risk relates to crypto-asset wallets holding the PTB Token or transactions in PTB Token and using it for money laundering or terrorist financing purposes or identified to a person known to have committed such offenses. To this end, there is a risk that a public address holding PTB Tokens could be flagged in relation to AML / CTF efforts. In such cases, receiving PTB Tokens could result in the holder's address being flagged by relevant authorities, trading platforms, or other service providers, which may lead to restrictions on transactions or the freezing of assets. Consequently, holders of PTB Tokens may face legal or regulatory challenges if their address becomes associated with illicit activities, impacting their ability to freely access, trade, or transfer their tokens. Furthermore, if the PTB Token is used for unlawful purposes, it could severely damage CCL's reputation. Such incidents may attract the attention of AML / CTF competent authorities, potentially resulting in regulatory enforcement and major disruption to the PTB Token's availability and flow in the market.
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I.4	Project Implementation-Related Risks	1. Development Risk: The system's complexity creates risks of bugs or vulnerabilities in the code. 2. Operational Risk: The network's success depends on the active participation of a robust ecosystem of LPs, traders, and developers. 3. Use-Case Risk: The project's value proposition relies on attracting real-world use cases, which may not materialize as anticipated. 4. Governance Challenges: The decentralized nature of blockchain networks can present governance challenges, particularly when it comes to decision-making and issue resolution. Ineffective governance models or disagreement between PTB Token holders may result in delays in addressing critical network concerns, instability, and even centralization of power among a small group of stakeholders. 5. Unknown adoption rates: Mass adoption of blockchain technology has not yet occurred and it is possible that the Portal Network and the PTB Tokens will not be used by a large number of users. It is not known whether users will adopt the Portal Network and there may be limited public interest which may impact the development of the Portal Network protocol and potential use, utility or value of the PTB Tokens. 6. Risk of competing networks: It is not known whether there will be another network that will compete directly or indirectly with the Portal Network. It is possible that alternative networks could be established that utilize the same open-source code and protocol underlying the Portal Network and/or attempt to facilitate services that are materially similar. It is not known whether the Portal Network will prevail in the competition, which could negatively impact the PTB Tokens. 7. Interoperability Risk: The value of the PTB Token is intrinsically linked to its capacity for seamless integration with various blockchain networks and decentralised applications (dApps). However, technical incompatibilities or deficiencies in cross-chain support could limit its functionality, thereby curtailing its potential use cases within the broader DeFi and Web3 landscapes. 8. General Contractual and Counterparty Risk: CCL neither operates nor controls, oversees, or manages the functioning of the trading platform where the PTB Token will be admitted. When a prospective holder buys or sells the PTB Token on a trading platform, CCL is not a contractual party to these
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		transactions. As a result, any legal relationship between PTB Token holders, the trading platform and any counterparties transacting on the trading platform is governed solely by the terms and conditions agreed between those parties. CCL assumes no responsibility or liability for the operations, services, security, performance, or any outcomes, whether financial or technical, arising from transactions conducted on the trading platform. CCL provides no assurances regarding any trading platform and assumes no responsibility or liability for any regulatory, compliance, operational, financial, technical, or reputational failures that may adversely affect its activities. This includes, but is not limited to, circumstances where such failures result in disruptions, restrictions on trading, or the trading platform halting or ceasing its operations entirely, due to sanctions, bankruptcy or alike. The foregoing may result in substantial or even total losses for PTB Token holders. 9. Pausing and Delisting Risk: CCL cannot guarantee that the PTB Token will remain listed or tradeable on any trading platforms. Delisting (or the temporary pausing of such listing) could significantly hinder the ability of PTB Token holders to buy, sell, or otherwise transact in PTB Tokens. In the event of delisting, PTB Token holders may face challenges in finding alternative markets or counterparties willing to trade PTB Tokens, which could adversely impact the PTB Token's liquidity and market value. Delisting could also negatively impact the price of the PTB Token, due to modified demand for the PTB Token and / or reputational impact. 10. Trading Risk: CCL does not control the secondary markets. There can be no assurance as to the secondary market (if any) in the PTB Tokens. CCL cannot guarantee the depth, stability, or sustainability of any secondary market for PTB Tokens. Limited market depth or trading activity may result in reduced liquidity, increased price volatility, and challenges in buying or selling PTB Tokens at desired prices and CCL cannot guarantee the healthy and consistent availability of buying or selling opportunities for PTB Tokens or the integrity of their market price. Trading activity may be affected by manipulative practices such as wash trading, frontrunning, and similar schemes. While trading platforms are subject to varying regulatory frameworks that may or may not prohibit such practices and impose oversight to detect and deter them, CCL assumes no responsibility or liability for their effective prevention or enforcement. 11. Key Persons Risk: A portion of PTB Token is allocated to the team, investors, advisors and other key persons, as set out with a structured vesting period to ensure long-term alignment. However, potential risks include unforeseen departures, changes in management, strategic
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		misalignment or divestment of PTB Tokens by relevant key persons, which could impact market confidence and trust of PTB Token holders.
I.5	Technology-Related Risks	1. Notary Chain Failure: A bug or attack on the central Notary Chain could disrupt network liveness. The Portal Network could be subject to critical exploits, such as re-entrancy attacks, logic errors, or oracle manipulation, which could lead to unintended token transfers, assets being drained from the system, or tokens being irretrievably lost. Fixing such issues may require significant coordination, governance approval, or even disruptive measures such as protocol migrations or forks, none of which are guaranteed to be successful. 2. Interoperability Risk: Failures in the communication protocols between different blockchains could lead to failed or inconsistent transactions due to changes in underlying blockchain protocols. 3. Upgrade Risks: Upgrades to the network, if not properly tested, could introduce critical vulnerabilities. 4. Infrastructure Dependencies: Blockchain networks depend on various underlying infrastructures such as internet connectivity, cloud services, and hardware systems, which may themselves be susceptible to attacks, outages, or external interference. Any disruption in these critical dependencies can compromise the accessibility and reliability of blockchain services, emphasizing the need for decentralized and resilient infrastructure solutions. 5. Validator Vulnerabilities: A large-scale failure of validators or a malicious collusion could halt the network or compromise its security. 6. Private Key Management: The security of crypto-assets heavily depends on the effective management of private keys by holders, which serve as the only means to access and control crypto-assets in self-custody. Losing a private key or engaging in poor security practices, such as sharing or storing keys insecurely, can result in the irreversible loss of assets. Additionally, theft or unauthorized access to private keys can lead to the complete loss of funds, emphasizing the importance of secure key storage solutions like hardware wallets and multi-signature schemes. 7. Blockchain and Smart Contract Vulnerability: The smart contracts associated with the PTB Token and / or the Portal Network are susceptible

		to coding vulnerabilities, bugs, or security flaws that could be exploited by malicious actors. A breach in the smart contract could result in unauthorized transactions, token loss, or manipulation of staking mechanisms, affecting the token's security and trust among holders. Even though security audits are conducted, unforeseen vulnerabilities may still pose a risk. 8. Risks of Ethereum network: Because PTB Tokens are based on the Ethereum network and the Portal Network is otherwise linked to the Ethereum Network, any malfunction, forking, breakdown or abandonment of the Ethereum network may have a material adverse effect on the PTB Tokens or the Portal Network. Moreover, advances in cryptography, or technical advances such as the development of quantum computing or code cracking, could present risks to the PTB Tokens and the Portal Network, including the utility of the PTB Tokens, the value of the PTB Tokens or theft or loss of PTB Tokens. It is also not fully known whether the Ethereum network will be able to sustain long-term operation of large-scaled-apps. The Ethereum network has experienced significant delays in processing block transactions in the past and it is not certain whether the Ethereum development community will resolve these technical issues in the future. 9. Ethereum may be surpassed or superseded: There is no guarantee that Ethereum network will not be supplanted by competing network that improve upon or surpass/supersede the Ethereum technology. It is not known whether the Ethereum network will become a predominant protocol adopted by global industry. If Ethereum is surpassed or superseded, then this could impact the PTB Tokens and the Portal Network and adoption declines. 10. Unknown impact of proposed changes to Ethereum: The Ethereum Foundation has laid out a roadmap for the improvement and development of Ethereum. While some of the future proposals offer promises to known technical issues, it is uncertain when these new improvements will be introduced, and whether they will be successful. 11. Prohibitively high gas prices for transactions: All transactions over the Ethereum network, including transactions in relation to the PTB Tokens, have a real-world cost in Ether (Gas). Gas prices fluctuate according to the demand for transactions on the Ethereum network and there is no certainty that Gas prices will not increase, and thereby make transactions in relation to PTB Tokens over the Ethereum network commercially unfeasible. In addition, high volumes could lead to very high Gas prices for processing transactions, which may make using the blockchain prohibitively expensive. Portal Network uses notary chain for all DEX related operations (with
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		minimal gas fees) and only uses Ethereum for settling high order operations like changing validators, PTB lock ups. 12. Consensus Failures: Issues with the Ethereum network's consensus mechanism can lead to serious disruptions such as network forks, operational halts, and a loss of trust among participants. Forks can result in duplicate transactions or diverging ledger states, causing confusion and potential financial losses. Ensuring a well-designed consensus algorithm and timely upgrades is essential to maintaining network stability and integrity. 13. Cybersecurity Threats: Blockchain networks are vulnerable to various cybersecurity threats that can compromise their operations and data integrity. Potential attacks include 51% attacks, where a single entity gains majority control over the network, Sybil attacks, where attackers create multiple fake identities to manipulate the network, and DDoS attacks, which can overwhelm nodes and disrupt network functionality. 14. Private Key Management: The security of crypto-assets heavily depends on the effective management of private keys by holders, which serve as the only means to access and control crypto-assets in self-custody. Losing a private key or engaging in poor security practices, such as sharing or storing keys insecurely, can result in the irreversible loss of assets. Additionally, theft or unauthorized access to private keys can lead to the complete loss of funds, emphasizing the importance of secure key storage solutions like hardware wallets and multi-signature schemes.
I.6	Mitigation measures	1. Non-Custodial Design: This is the primary risk mitigation strategy. Since validators never control user funds, the risk of theft through collusion or hacks is drastically reduced. 2. Atomic Swaps via HTLCs: This ensures that cross-chain trades are trustless and atomic, preventing loss of funds from incomplete swaps. 3. Decentralized Validator Set: Spreading network control across many independent validators minimizes single points of failure. 4. Economic Incentives (Staking & Slashing): The proof-of-stake model, with significant capital at risk and penalties for misbehavior, strongly incentivizes validators to act honestly and maintain network security.

		5. Robust Consensus: The use of CometBFT provides a proven, secure, and fault-tolerant consensus mechanism. 6. Regulatory Monitoring: CCL stays up to date with legal and regulatory updates and continuously works to ensure compliance of the PTB Token with any applicable laws and regulations. 7. Project Implementation and Admission to Trading Risks: While CCL can in no way guarantee the listing of the PTB Token on particular platforms, it will ensure that all necessary actions are taken to ensure listing on targeted platforms, while maintaining the highest level of integrity and professionalism.
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Part J - Information on the suitability indicators in relation to adverse impact on the climate and other environment-related adverse impacts

J.1	Adverse impacts on climate and other environment-related adverse impacts	As set out in section H of this crypto-asset whitepaper, the PTB Token is based on the Ethereum Network and therefore leverages the Ethereum PoS consensus mechanism. Transaction validation and ledger maintenance are not expected to exceed 500,000 kWh per year. The energy required to validate a single PTB Token transaction is estimated at 0.00725 kWh per transaction. For further details on the consensus mechanism and its impact on climate and environmental factors, please refer to Table 1 in the Appendix of this crypto-asset whitepaper provides the required information regarding the principal adverse effects of the consensus mechanism on climate and other environmental aspects.
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APPENDIX

TABLE 1: MANDATORY INFORMATION ON PRINCIPAL ADVERSE IMPACTS ON THE CLIMATE AND OTHER ENVIRONMENTAL RELATED ADVERSE IMPACTS OF THE CONSENSUS MECHANISM

N	Field	Content
S.1	Name	Chain Cross LTD (CCL)
S.2	Relevant legal entity identifier	CCL's company number issued by the Registrar of Corporate Affairs of the BVI is 2146905.
S.3	Name of the crypto-asset	PTB Token
S.4	Consensus Mechanism	Ethereum Proof-of-Stake Consensus Mechanism
S.5	Incentive Mechanisms and Applicable Fees	Ethereum uses a gas fee system to assign a cost to computational tasks, such as processing transactions or executing smart contracts. These fees paid in ETH, compensate validators for their work and assist in regulating network activity. In addition, validators receive newly issued ETH for participating in the Ethereum network's consensus mechanism. Participants must stake at least 32 ETH to become a validator. Validators who act maliciously or fail to perform their duties can lose part of their staked ETH, a mechanism known as "slashing". For more details, visit Ethereum's official documentation and repositories: • Ethereum Foundation: https://ethereum.org/en/ • Ethereum Developer Resources: https://ethereum.org/en/developers/ • Ethereum GitHub Repositories: https://github.com/ethereum/
S.6	Beginning of the period to which disclosure relates	The present disclosures have been prepared on the basis of a projected estimate in accordance with Article 6(7) of Commission Delegated Regulation (EU) 2025/422 for the period beginning August 21, 2025.
S.7	End of the period to which the disclosure relates	The present disclosures have been prepared on the basis of a projected estimate in accordance with Article

	6(7) of Commission Delegated Regulation (EU) 2025/422 for the period ending August 21, 2026.
Mandatory key indicator on energy consumption	
S.8 Energy consumption	Less than 500,000 kWh No information is currently available with respect to the annualised energy assumption attributable to the PTB Token. In accordance with Article 6(7) of Commission Delegated Regulation (EU) 2025/422, CCL estimates an annualised energy consumption of ~900–3,600 kWh/year kWh in respect of the validation of transactions and ledger maintenance attributable to the PTB Token during the estimated disclosure period.
S.9 Energy consumption sources and methodologies	The sources for information related to energy consumption are as follows: • Etherscan.io: Transaction numbers in estimated disclosure period • Crypto Carbon Ratings Institute (CCRI): Annualised electricity consumption for the Ethereum blockchain ◦ https://indices.carbon-ratings.com/ The methodology used in calculating the energy consumption related to the PTB Token is based on transaction numbers sourced from the website “etherscan.io” which is a blockchain explorer for the Ethereum Network and the methodology proposed by CCRI in the white papers titled Methodologies to calculate sustainability indicators for the Regulation (EU) 2023/1114 and Accounting for carbon emissions caused by cryptocurrency and token systems (2021, updated 2023). On an annualised basis, CCL estimates 100,000 of transactions relating to the PTB Token during the estimated disclosure period. Ethereum blockchain had 1,713,301 transactions in the last 24 hours, based on etherscan.io. This figure is significantly higher than the average daily transactions recorded on the Ethereum network during

	the last five years, as can be verified here: https://etherscan.io/chart/tx By assuming an average of 1,713,301 transactions per day on the Ethereum network, a projected 625,354,865 transactions are assumed to be recorded on the Ethereum network during the disclosure reference period. Based on the above assumptions, it is estimated that 0.016% of transactions on the Ethereum network are attributable to the PTB Token. Considering that according to CCRI's indices, Ethereum's annualised energy consumption is 4,532,828. kWh as at August 27, 2025, applying the percentage of 0.016 %. it is estimated that annualised energy consumption attributable to the PTB Token will be approximately 725.25 for the disclosure reference period, which is significantly lower than 500,000,000 kWh. The calculation guidance in point AR 32 of Appendix A to the ESRS E1 in Annex I to Delegated Regulation (EU) 2023/2772 has been used only to the extent that public information available to CCL with respect to the Ethereum Network incorporates such guidance in calculating the relevant energy consumption. CCL has no information with respect to the energy consumption of the Ethereum Network, other than publicly available information. The above estimates are based on projections utilising past data and information obtained from third party sources as set out above. CCL is unable to conclusively determine the future number of transactions relating to the PTB Token, the Ethereum network or the energy consumption attributable to the PTB Token or the Ethereum Network more generally. No information is included in this section with respect to: (a) the methodology to estimate missing, unreported, or underreported metrics; (b) the external datasets used in the estimation of missing, unreported or underreported metrics; and
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	(c) the methodology used to offset energy consumption. <u>Other limitations and considerations</u> While using transaction count as a basis for analysis offers consistency and practicality, it is important to acknowledge certain limitations in this approach: • Different types of transactions place different demands on the network: Some transactions are simple, such as basic value transfers, while others may involve more complex functions, such as smart contract executions. Treating all transactions as equal does not reflect these variations in resource usage. • Variability in transaction complexity affects energy use: On networks like Ethereum, blocks are measured by gas limits rather than data size. As a result, a single block might include a small number of complex, high-gas transactions or a larger number of simple ones. • Energy usage by nodes is mostly stable: Most of the energy consumed by network participants relates to ongoing functions like maintaining the blockchain and communicating with peers. Transaction volume (within normal limits) has only a limited effect on energy consumption, so while the transaction-based method helps allocate usage across networks, it does not measure precise energy draw per transaction. • Failed or delayed transactions still consume energy: Even when a transaction does not succeed, it may still use network resources (e.g. gas fees paid). The current transaction-based method adopted counts only successful transactions and assumes a consistent failure rate across networks. However, this may not always reflect actual behaviour, particularly in networks where low-fee transactions may remain unconfirmed for longer, yet still require energy to be relayed. The above factors highlight the trade-offs made in adopting a transaction-based method. The approach is intended to support standardised and understandable disclosures across different blockchain systems, with
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