Ethernity Cloud

ETHERNITY CLOUD

Decentralized Confidential Computing

Whitepaper

11 April 2024

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ETHERNITY SWAP LTD

DISCLAIMER

PLEASE CAREFULLY READ THE DISCLAIMER SECTION AS WELL AS EACH SUBSEQUENT DISCLAIMER PARAGRAPGH ACROSS THE WHITEPAPER TO PROPERLY BE INFORMED OF THE RIKS ASSOCIATED WITH THE ACTIVITY AND OBJECTIVES DESCRIBES IN THIS WHITEPAPER.

INTERESTED PARTIES SHALL CONSULT THEIR OWN ADVISORS CONCERNING THE LEGAL, TAX, ECONOMIC, FINANCIAL AND OTHER ASPECTS ASSOCIATED WITH THE ECLD TOKEN AND THE ETHERNITY CLOUD ECOSYSTEM.

UPON READING AND PARTICIPATION TO THE ECOSYSTEM EXPLAINED IN THE WHITEPAPER, THE PERSON IN QUESTION SHALL FREELY, VOLUNATARILY AND UNEQUIVOCALLY GIVE VALID CONSENT THAT THE SUCH RISKS, RIGHTS, OBLIGATIONS AND RESPONSIBILITIES ARE UNDERSTOOD AND ACCORDINGLY ACCEPTED.

DISCLAIMER

The ECLD Token is classified as a Virtual Financial Asset in terms of the applicable Virtual Financial Assets Act. This Whitepaper has been prepared and registered with the MFSA in accordance with the Virtual Financial Assets Act. The ECLD Token does not possess any of the necessary characteristics required to be considered as electronic money, a virtual token (as the term is defined in the VFA Act), transferable security, money market instrument, unit in collective investment schemes, commodity, security, or any other form of a financial instrument as defined in the Markets in Financial Instruments Directive. Furthermore, this Whitepaper does not constitute a prospectus and does not constitute an offer of financial instruments and/or securities to the public or an offer in any way connected to a collective investment scheme.

Any decision to purchase ECLD Tokens shall be based on consideration of this Whitepaper as a whole. The Issuer reserves the right to (i) make changes to this Whitepaper and any documents linked to the ECLD Token and/or holding, and use of the ECLD Token to ensure compliance with the applicable regulatory requirements, provided that such changes are carried out in line with applicable laws, and (ii) do all that is necessary to be in compliance with any regulatory requirements, including but not limited to, interrupting, suspending or ceasing the operations or trading of the ECLD Token if deemed necessary at the Issuer's sole discretion, provided that any such measure shall be taken in accordance with applicable laws.

It is solely up to any person wishing to participate in this issue of ECLD Tokens to ensure that no prior or subsequent approval, notification, registration or license is needed or if such is needed, it is solely up to such person to obtain such prior or subsequent approval, notification, registration or license of any form in the country where such person is a citizen, national, resident or having a similar connecting factor, or incorporated, registered or effectively managed, and the Issuer shall not in any way be liable for any non-conformity with any laws, rules or regulations by any such person.

The ECLD Tokens are not available to (i) a natural person being a citizen, national, resident or having a similar connecting factor to; or (ii) a juridical person being incorporated, registered or effectively managed and controlled from or within a country, jurisdiction or territory where the placing, offering

to the public, or the holding and use of the ECLD Token and/or virtual currency or other tokens at any other moment in time is prohibited by laws, regulations or other practices and policies in the said country, jurisdiction or territory, which is taken to include, but is not limited to, the United States of America and any other of the Restricted Areas, or any other jurisdiction where the aforementioned is/are prohibited.

This Whitepaper, the ECLD Tokens and/or the holding, use, and trading of the ECLD Tokens carry no rights, whether express or implied, other than for their use on the ETHERNITY CLOUD Ecosystem and trading on DLT Exchanges following the ECLD Token's admission to trading on such DLT Exchange or Exchanges. ECLD Tokens do not represent or confer any ownership right or stake, share or security or equivalent rights, intellectual property rights, or any other form of participation relating to the Issuer. ECLD Tokens do not give the holder thereof any entitlement to acquire any such interest or entitlement in respect of the Issuer. Furthermore, the Issuer shall not and shall be under no obligation to return or repay any investment made in virtue of this Whitepaper. The body of administrators of the Issuer, as identified in the Considerations section of this Whitepaper, are the persons responsible for the information contained in this Whitepaper.

This Whitepaper and the offering of ECLD Tokens may not be taken as an implication: (i) that the information contained in this Whitepaper is accurate and complete subsequent to its date of issue; or (ii) that there has been no material adverse change in the financial position of the Issuer since such date; or (iii) that any other information supplied in connection with this Whitepaper is accurate at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing same.

All advisors to the Issuer, including the VFA Agent to the extent allowed by applicable law, have acted and are acting exclusively for the Issuer in relation to this offering of ECLD Tokens and have no contractual, fiduciary or other obligation or responsibility towards any other person, and will, accordingly, not be responsible to any Tokenholder or any other person whomsoever in relation to the transaction proposed in this Whitepaper, neither shall such advisors be responsible for the contents of, and any information contained in this Whitepaper, its completeness or accuracy or any other statement made in connection therewith.

This Whitepaper as well as all and any agreements, acceptances, and contracts resulting therefrom shall be governed by the laws of Malta, unless the contrary is expressly stated, and any person acquiring any ECLD Tokens pursuant to this Whitepaper shall submit to the exclusive jurisdiction of the courts of Malta, without limiting in any manner the right of the Issuer to bring any action, suit or proceeding in any other competent jurisdiction, arising out of or in connection with any acquisition of ECLD Tokens, or agreement, acceptance or contract resulting here from, or the Whitepaper as a whole.

Statements made in this Whitepaper are unless otherwise stated, based on the law and practice currently in force in Malta and are subject to changes therein.

To the best of the knowledge and belief of the administrators of the Issuer (who have all taken reasonable care to ensure such is the case), the information contained in this Whitepaper is in accordance with the facts and does not omit anything likely to affect the import of such information.

The administrators of the Issuer, Mr Iosif Peterfi and Mr Ioan Munteanu, in their capacity as Members of the Board of Administrators of Ethernity SWAP Ltd, accept full responsibility accordingly.

GLOSSARY OF TERMS

Blockchain	means a type of distributed ledger technology, comprised of unalterable, digitally recorded data in packages called blocks.
Distributed Ledger Technology or DLT	means a database system in which information is recorded, consensually shared, and synchronized across a network of multiple nodes as further described in the First Schedule of the Innovative Technology Arrangements and Services Act, Chapter 592 of the laws of Malta.
DLT Asset	shall have the same meaning as that attributed to it in the VFA Act.
DLT Exchange	means any trading and/or exchange platform or facility, whether in Malta or in another jurisdiction, on which any form of DLT asset may be transacted in accordance with the rules of the platform or facility.
Experienced Investor	means a Participant or prospective Participant who meets the requirements to be classified and/or treated as an Experienced Investor in accordance with the relevant Section.
ETH or Ether	means the digital asset developed in virtue of the Ethereum Blockchain and referred to as "Ether".
European Economic Area or EEA	means all EU countries and also Iceland, Liechtenstein, and Norway.
FATF or GAFI	refers to the Financial Action Task Force or Groupe d'Action Financière International.
Fiat currency	means currency that represents legal tender issued by a sovereign country and is considered to be backed up by the central bank of its government.
Hard Cap	shall mean the set maximum amount of ECLD Tokens to be allocated for token conversion during and for such purposes.
Soft Cap	shall mean the set minimum amount of ECLD Tokens to be allocated for token conversion during and for such purposes.
Inexperienced Investor	means any Participant or prospective Participant who does not meet any of the requirements to be classified as an Experienced Investor.
Initial Virtual Financial Asset Offering or Initial VFA Offering or IVFAO	means the financing exercise carried out in virtue of this Whitepaper whereby a Virtual Financial Asset, being the ECLD Token, is not offered for sale to the public, whether such sale shall be undertaken directly by the Issuer or through one or more intermediaries, such as one or more DLT Exchanges and/or brokers; However, IVFAO solely means Token Conversion for the purpose of this Whitepaper registration.
Issuer, ETHERNITY CLOUD or Company	refers to ETHERNITY SWAP Limited, a company registered under the Laws of BVI on 3 August 2023 for an indefinite period under the registration number 2129507 ("**the Issuer**"), with registered address at

	Intershore Chambers, P.O. Box 4342, Road Town, Tortola, British Virgin Islands.
Maltese Financial Services Authority or MFSA	refers to the Malta Financial Services Authority, established by virtue of the Malta Financial Services Act, Chapter 330 of the laws of Malta.
Participant	means a person or an entity participating in the Issuer's Initial Virtual Financial Asset Offering and has successfully completed all the necessary steps to become a Tokenholder.
Private Sale	refers to any sale of ECLD Tokens which is carried out by means of a private placement and which shall thus not form part of the IVFAO
Restricted Areas	means the USA, Puerto Rico, US Virgin Islands, Canada, China, Singapore, Afghanistan, Central African Republic, Cuba, Democratic Republic of the Congo, Eritrea, Iran, Iraq, Libya, North Korea, Russia, Somalia, South Korea, South Sudan, Sudan, Yemen, Zambia, and Germany. The Website, ETHERNITY CLOUD Ecosystem, and ECLD Tokens are not offered for use to natural and legal persons, having their permanent residence or their seat of incorporation in the above-mentioned countries.
Smart Contract	means a form of technology arrangement being: (a) a computer protocol; or (b) an agreement concluded wholly or partly in an electronic form, which is automatable and enforceable by computer code, although some parts may require human input and control, or as better defined in the Innovative Technology Arrangements and Services Act, Chapter 592 of the laws of Malta.
Terms and Conditions	refers to terms and conditions that may apply in connection with ECLD Tokens which are obtained other than through the IVFAO; such terms and conditions may relate to the timing of obtaining same, use, circulation, and/or transferability of the said ECLD Tokens, among other terms. Such terms and conditions may vary and the Issuer shall have full discretion when negotiating such terms with third parties, and account may be taken of restrictions imposed by any DLT Exchange or other intermediary authorised to deal in ECLD Tokens by the Issuer.
Tokenholder(s)	means a holder(s) of ECLD Tokens.
Token Sale Agreement	means an agreement between the Issuer and a Participant or a private acquirer of ECLD Tokens describing the terms of the token sale; therefore, a Token Sale Agreement can exist both within the private sale sphere as well as within the IVFAO environment.
Total Supply	means the total supply of ECLD Tokens which the Issuer intends to create around 1,000,000,000 ECLD Tokens, respectively the precise equivalent amount in a ratio of 1:1 to convert ETNY into ECLD tokens, as further described in Section – TOKEN ALLOCATION.

ECLD Token(s)	means the DLT Asset developed by ETHERNITY CLOUD and that is being offered in virtue of this Whitepaper.
ETHERNITY CLOUD Ecosystem/Protocol	means the ecosystem that is being developed by ETHERNITY CLOUD which is described in detail in this Whitepaper detailing an underlying, integrated business and technological concept and ecosystem, the ECLD Token, and its economy as well as ETHERNITY CLOUD business lines, solutions and products built on top of such set of technologies that allow for a specific market implementation.
ETHERNITY CLOUD Project/Protocol	means the project carried forward by ETHERNITY CLOUD for the purposes of developing, managing, and running of the ETHERNITY CLOUD Ecosystem, its products, and services.
VAT	refers to the value-added tax of relevant jurisdiction (if applicable).
VFA Agent	refers to CSB Fintech Limited, a company registered under the laws of Malta having its registered address situated at LEVEL 3, TOWER BUSINESS CENTRE, TOWER STREET, SWATAR, BIRKIRKARA BKR 4013, Malta, bearing company registration number C 94249 and registered as VFA Agent with the MFSA in terms of the VFA Act.
Virtual Financial Asset or VFA	has the same meaning attributed to it in virtue of the VFA Act.
Virtual Financial Assets Act or VFA Act	means the Malta Virtual Financial Assets Act, Chapter 590 of the laws of Malta.
Website	refers to WWW.ETHERNITY.CLOUD, including all subdomains and all their respective pages and services as well as the documents published therein.
Whitepaper	shall means this electronic Whitepaper written by ETHERNITY CLOUD, which describes the ECLD Tokens and the ETHERNITY CLOUD Ecosystem, and which can be found on the Website. The Whitepaper has been drafted in compliance with the First Schedule of the Virtual Financial Assets Act of Malta.

ABBREVIATIONS

CfR	Commissioner for Revenue
ECDSA	Elliptic Curve Digital Signature Algorithm
EdDSA	Edwards-curve Digital Signature Algorithm
TLS	Transport Layer Security
MiCA(R)	Markets in Crypto Assets Regulation
IT	Information technology
CFT	Combating the financing of terrorism
MFSA	Malta Financial Services Authority
IBC	Inter-Blockchain Communication protocol
GDPR	General Data Protection Regulation
DPO	Data Protection Officer
CEO	Chief Executive Officer
ECB	European Central Bank

EIB	European Investment Bank
IT(C)	Information and communication technologies
IMF	International Monetary Fund
M	Million
B	Billion
Q	Quarter
PR	Public relations
CAGR	Compound annual growth rate
UI	User Interface
UX	User Experience
ERC	Ethereum Request for Comments
EIP	Ethereum Improvement Proposal
ICO	Initial Coin Offering
EUR	euro
USD	United States dollar
BTC	Bitcoin
ETH	Ethereum
DLT	Distributed Ledger Technology
PDF	Portable Document Format
AML	Anti-Money-Laundering
KYC	Know-your-customer
IPR	Intellectual and Industrial Property Rights
R&D	Research and Development
i.a.	inter alia
i.e.	id est
e.g.	exempli gratia
C2C	Consumer to Consumer
B2B	Business to Business
B2C	Business to Consumer
PoS	Proof of Stake
PoW	Proof of Work
BFT	Byzantine Fault Tolerance
SDK	Software Development Kit
VFA	Virtual Financial Asset
IVFAO	Initial Virtual Financial Asset Offering
BVI	British Virgin Islands

THE WHITEPAPER OF ETHERNITY CLOUD AND OF THE ECLD TOKEN

This document ("the Whitepaper") has been drafted by ETHERNITY SWAP LIMITED (the Issuer) for the offering of **ECLD Tokens,** which qualify as Virtual Financial Assets ("**VFA**") under the Virtual Financial Assets Act ("**VFA Act**") of Malta.

The Whitepaper shall be read in its entirety and considered as a whole before making any decision to acquire ECLD Tokens. The offer of ECLD Tokens does not form an offer, nor any solicitation to sell financial instruments. If the Issuer decides to make any such offer or solicitation of financial instruments, it shall do so using a prospectus or other offering documentation in terms of any applicable Maltese law.

The Whitepaper does not purport to be all-inclusive and does not necessarily contain all the information that the prospective Participants may desire in deciding whether or not to purchase the ECLD Tokens. If prospective Participants are in any doubt about the contents of the Whitepaper, they should consult their financial or other professional advisers.

The information contained in the Whitepaper has been compiled from sources believed to be reliable, primarily from the management team of the Issuer.

The persons responsible for the Whitepaper is the Director of ETHERNITY SWAP LIMITED, registered in BVI namely:

- Iosif Peterfi (Executive Director and CEO)

Without prejudice to article 10 of the VFA Act, civil liability attaches to those persons who have tabled this Whitepaper and have applied for the registration of this Whitepaper, namely the Issuer. Thus, The Issuer is responsible for the information contained in the Whitepaper, and to the best of its knowledge, it has taken all reasonable care to ensure that the information contained herein is in accordance with the facts and does not omit anything likely to affect the importance of such information. Nevertheless, The Issuer expressly disclaims any and all liability based on such information, errors in such information, or omissions in such information that are not the result of willful intent or gross negligence. In connection with the offer made in the Whitepaper, no person is authorized to give any

information or to make any representations other than those contained in the Whitepaper and/or the Website.

In the Whitepaper, the Issuer aims to prove that the blockchain technology at stake, namely the Ethernity Cloud protocol, has the potential to revolutionize various business processes starting with the decentralization of confidential computing.

On the following pages, the reader will find a description of ETHERNITY CLOUD's proprietary solutions as well as other technologies used and adapted for the purpose of ETHERNITY CLOUD's solutions development, including ETHERNITY CLOUD's **proposed solutions as services to decentralize the cloud industry through confidential computing power and encryption of data during transfers, at rest and in use by relying less on the locations of the sender and of the recipient**, and utilizing, DLT solutions (such as the **Polygon Blockchain**, and initially the **bloxberg Blockchain**), as well as cryptographic mechanisms and Blockchain (**POLYGON SDK**) for increased security and efficiency.

In this Whitepaper, the reader will find business descriptions, including the problems and challenges that ETHERNITY CLOUD solutions aim to answer, and the business use-cases covered by the ETHERNITY CLOUD Ecosystem, as well as the technical description of its components.

Through this Whitepaper, the Issuer would like to demonstrate to the reader how decentralized cloud computing through a given DLT can use the general concept of digital, blockchain-based "**Smart Contracts**"[1] in order to provide access to state-of-the-art decentralized confidential computing on ETHEREUM compatible blockchain.[2]

Ethernity Cloud's vision about the future of the cloud has three imperative features: high integrity, confidential, continuous available. Within Ethernity Cloud, the nodes are location

[1] A smart contract is a program stored on a blockchain that runs when predetermined conditions are met. They typically are used to automate the execution of an agreement, so that all participants can be immediately certain of the outcome, without any involvement from an intermediary or time loss.

[2] Ethereum is a Layer 1 blockchain, which provide the new market participants with the possibility to build the first smart contracts on top of it.

agnostic, self-replicating, constantly spawning around the internet without user interaction, exactly as defined in the Ethereum compatible smart contract.

Thus, the Issuer's mission is to pioneer the decentralization of cloud services is to develop a decentralized ecosystem that allows regular cloud software to be run as decentralized cloud applications by leveraging existing blockchain technology.

ETHERNITY CLOUD and POLYGON cooperate extensively on this matter. It is to be noted that the first milestones of this protocol were achieved through the use of the Bloxberg blockchain. Currently, this Whitepaper aims to describe the full transition from the former to the to the Polygon blockchain[3] and the conversion of the ETNY[4] tokens into ECLD[5] tokens issued by Ethernity Swap Ltd by utilizing Polygon's technology and trough a bridge.[6]

The prospective Participants should not construe the contents of the Whitepaper as an investment, legal, business, accounting, tax, or other advice. In deciding to acquire ECLD Tokens, the prospective Participants must rely on their examination of the Issuer and the terms of the offering, including the merits and risks involved. The prospective Participants should consult their attorneys, business advisors, and/or tax advisors as to legal, business, accounting, tax, and related matters concerning the acquisition of ECLD Tokens.

N.B.: This Whitepaper does NOT seek to issue the token with the objective of fund raising through an initial virtual financial asset offering ('**IVFAO'**). Only a token conversion will take place by the registration of this Whitepaper by the home regulator.

The sole goal is to obtain proper and adequate authorization from the competent authority (i.e., MFSA in the home state of the Issuer, namely Malta) in order to be able to seek admission on a DLT exchange for trading in terms of the VFA Act, which will benefit the development of

[3] Polygon is a Layer 2 solution built to solve the scalability issues on the Ethereum blockchain before the Merge and transition to ETH 2.0.

[4] Virtual tokens under the VFA Act also known as utility tokens within the community.

[5] Virtual financial assets under the VFA Act.

[6] A bridge is a smart contract, which contains several components and steps as described in the relevant Figure.

the community (e.g., the node operators, underlying company for the development of the protocol at stake).

All references in this Whitepaper to “Malta” are to the “Republic of Malta.”

Unless it appears otherwise from the context:

(a) words importing the singular shall include the plural and vice-versa;
(b) words importing the masculine gender shall include the feminine gender and vice-versa;
(c) the word “may” shall be construed as permissive and the word “shall” shall be construed as imperative;
(d) any reference to a person includes natural persons, firms, partnerships, companies, corporations, associations, organisations, governments, states, foundations, or trusts;
(e) any reference to a person includes that person’s legal personal representatives, successors, and assignees;
(f) any phrase introduced by the terms “including,” “include,” “in particular” or any similar expression is illustrative only and does not limit the sense of the words preceding those terms; (g) any reference to a law, legislative act, and/or other legislation shall mean that particular law, legislative act, and/or legislation as in force at the time of issue of this Whitepaper.

I. EXECUTIVE SUMMARY

THE ISSUER & PROMOTERS

ETHERNITY SWAP LIMITED (i.e., **the Issuer** of the Virtual Financial Assets) is a private limited liability company incorporated under the laws of BVI on 3 August 2022 for an indefinite period of time under the registration number **2129507** ("**the Issuer**") with registered address at Intershore Chambers, P.O. Box 4342, Road Town, Tortola, British Virgin Islands. The Issuer was created to execute the ETHERNITY CLOUD Protocol Project and to develop the underlying technology and concept.

VFA Agent: CSB Fintech Limited

Financial & Systems Auditor: FACT Technologies Limited (Group) (FACT Audit & FACT Technologies)

Legal Advisors: Sali Blockchain & Crypto Regulations (Amsterdam, Netherlands)

GTG Advocates (Valletta, Malta)

ETHERNITY CLOUD: MISSION, INFRASTRUCTURE, TOKENIZATION REASON

ETHERNITY CLOUD has been created by industry leaders and experts with the mission of reshaping entire industries. ETHERNITY CLOUD takes the lead in revolutionizing the cloud industry. In the past decade, software has migrated from desktop, residential, and small business servers to cloud infrastructure, which stores user data on remote but centralized servers. Centralized servers are hackers' principal targets.

In the first half of 2019 alone, over 4.1 billion records were lost due to data intrusions, the majority of which involved cloud computing servers. This ecosystem aims to secure the transfer of data at all costs and at any given moment for the least cost available worldwide.

The infrastructure software of Ethernity Cloud is based on open-source services and technologies. Using open-source technologies and industry-wide standards, the migration from conventional, centralized cloud providers to Ethernity Cloud is quite straightforward.

Other proposed decentralized hosting solutions are excessively complicated and attempt to reinvent the wheel. We endeavor to make the end-user's transition to the decentralized cloud as transparent, secure, and easy as feasible. Moreover, the Ethernity Cloud SDK enables anyone to contribute and launch their own decentralized solutions.

When attempting to establish a completely decentralized cloud infrastructure, numerous obstacles must be overcome. The decentralized solution should offer comparable efficacy and scalability. Simultaneously, it must preserve the software's availability, privacy, integrity, and confidentiality.

Ethernity Cloud's purpose is to provide the blockchain infrastructure for participants to operate their preferred cloud software decentralized and rent their idle or excess hardware for monetary gain, all while incentivizing the developers of decentralized cloud applications. This will be accomplished by utilizing the ETNY Token, which is the token used within the Ethernity Cloud ecosystem and serves as the payment and reward mechanism for the Etherntiy Cloud ecosystem.

The interaction between developers and Ethernity Cloud is essential for the rapid adoption of our ecosystem. Every time a service is provisioned utilizing a particular decentralized cloud application, the application developer receives an incentive proportional to the amount transacted. We believe that any developer who joins our endeavor to expand the decentralized cloud by integrating existing cloud applications into Ethernity Cloud's ecosystem is moving in the correct direction.

State-of-the-art cloud services on blockchain

ETHERNITY CLOUD enables both businesses and consumers to utilize a decentralized network designed for confidential cloud computing (hereinafter: “concept”). The quintessential idea is to facilitate the migration from regular, centralized cloud providers to Ethernity Cloud in order to decentralize the infrastructure. Immediately, one may count as byproducts the following characteristics: efficiency, high speed, diminished risk of amalgamation of nodes or concentration of a group of operators controlling the overall architecture, lower and lower costs with the extension of the protocol and its validating nodes.

Ethernity Cloud functions as a service provider for decentralized infrastructure of the underlying concept, which is currently available on mobile devices via a user-friendly interface, that provides technical methods to meet the following goals:

a) **Service Confidentiality.** The buyer's data is encrypted at all times using robust open encryption algorithms. Our aim is for the sellers to be able to monitor their resource usage but be unable to interfere with or tamper with the service running on their computers. Any attempt is prohibited by the network service monitoring system.
b) **Decentralized Domain Name System.** Service buyers benefit from decentralized DNS blockchains or public services. Ethernity Cloud supports the developers implementation of these technologies in their decentralized applications.
c) **Continuous Availability.** Buyer's services are available at all times due to the design that allows multiple instances of the same node to run and sync continuously. Anytime one of the instances fails for any given reason, all other instances will still be up and ready to resume the service. They will be spread geographically according to the buyer's preference.
d) **Performance.** Buyers are able to rate their service sellers, and this ensures the service sellers are providing their advertised service at full capacity, creating a more competitive market and a better overall service provided to the buyers.

The ETHERNITY CLOUD Solution

Think of ETHERNITY CLOUD as uniquely combining the skills and knowledge of an expert in cloud services, a Blockchain programmer, and many intermediaries for the distribution of the underlying concept. ETHERNITY CLOUD solves the skyrocketing operational costs cloud industry that created this global challenge in the last years. In addition, this decentralized ecosystem democratizes the industry by reducing the need for reliability on one centrally operated server exclusively controlled by one entity and redistributing the validation throughout thousands of nodes at the moment. This methodology shall empower the community and attract more outside interest in the coming years of development. Thus, Ethernity Cloud embarks on a mission to provide a decentralized cloud tailored to

accommodate privacy and security for data transfers, continuous availability, and high performance.

ECOSYSTEM ARCHITECTURE

ETHERNITY CLOUD will become indispensable for multiple industries. One can imagine clients that this protocol is the most suitable solution to provide complementary support to Amazon's AWS cloud services or other market leaders alike (e.g., Google Cloud) in order to prevent possible future discontinuation of data transfers and other secured cloud services in this realm.

I. ENCRYPTION

Our architecture was developed to give priority to the most secure encryption and hashing algorithms while reducing overhead to a minimum in order to minimise performance losses. This was accomplished by prioritising the most secure encryption and hashing techniques.
The encryption of data on the blockchain, the encryption of data while it is in transit, and the encryption of data while it is at rest are all discussed in this section.
Because we are concerned about our users' privacy, we have determined that it is vital to encrypt any data that is transferred over the network.

Even the most advanced cryptographic assaults, like as brute-force and collusion attacks, will not be able to decode data while it is in transit since the ecosystem has been constructed to prevent this.

The encryption of data while it is in rest has the same level of significance. During the creation of Ethernity Cloud, a trustless business model was one of the concepts that was investigated. Data is saved throughout the network, but decentralized cloud service providers will not be able to access, read, alter, or otherwise interfere with the Ethernity Cloud node that functions on their computer. This prevents data from being compromised.

In a manner analogous to blockchain technology, the trustless design paradigm is implemented in Ethernity Cloud. Participants in a network are presumed to be unreliable simply because this is the default setting. The coding of the open-source programme maintains and enforces trust, providing users of decentralized cloud storage with reassurance that their data will remain secure even while being processed by numerous entities.

The architecture was developed to give priority to the most secure encryption and hashing algorithms while reducing overhead to a minimum in order to minimise performance losses. This was accomplished by prioritising the most secure encryption and hashing techniques.

The encryption of data on the blockchain, the encryption of data while it is in transit, and the encryption of data while it is at rest are all discussed in this section.

II. Confidentiality

Because of the proliferation of vast quantities of data and the increasing centralization of computer resources in the cloud, protecting one's confidentiality has become one of the most urgent issues facing the world today. Using Trusted Execution Enclave technology, also called confidential computing, the data is protected during use, which solves one of the biggest issues of trust in regards to cloud service providers.

III. DECENTRALIZED DNS

The existing architecture of the Domain Name System (DNS) on the Internet is extremely centralized, which makes it vulnerable to assaults. Cache poisoning, hijacking, distributed denial of service attacks, and censorship are some of the current problems associated with DNS.

All of these threats may be avoided by using a DNS propagation method that does not rely on a centralised server. As a result, Ethernity Cloud came to the conclusion that they should use this technique.

Because of the level of complexity involved, putting it into practise is not an easy task. The assistance that Ethernity Cloud provides to packagers and developers of decentralised cloud applications is the primary focus of The Issuer's operations. If developers adhere to the rules laid forth by the Ethernity Cloud project, they will have a much easier time converting existing applications or building new decentralised online applications from the ground up. Both conventional DNS services and decentralised DNS services will allow users to access the decentralised apps that the developers have created.

Regular Internet users who are not part of the Ethernity Cloud network will be able to access the decentralised cloud application for free by employing open source software that is uncomplicated and only slightly intrusive. This will allow them to utilise the conventional DNS as well as the decentralised DNS.

IV. CONTINUOUS AVAILABILITY

When conceptualising of and setting up a decentralised cloud ecosystem, there are a number of fundamental aspects that need to be taken into consideration. The degree to which the service may be accessed is the single most important consideration to take into account.

In the present day, the physical, logistical, and hardware capabilities of cloud service providers are taken into account throughout the process of generating uptime service level agreements (SLAs). These powers are limited to some extent with the present technology that is publicly available. It may be difficult and costly to ensure that a network will always be available 100 percent of the time when the architecture of the network is concentrated in a limited number of places. It is impossible to predict when unanticipated events may take place; thus, it is necessary to do regular maintenance on the hardware.

The provision of continuous service availability is the cornerstone of Ethernity CLOUD. The data of the person who purchased the service is sent around the network in a manner that is not highly secure.

It is feasible to achieve 100% service availability by virtue of the decentralised structure of the ecosystem, which, in turn, makes it able to do so at a cost that is much lower than that of standard cloud solutions.

V. PERFORMANCE

When attempting to select the most affordable cloud service provider, the market is frequently misled by various factors. This is because it is incommensurably difficult to make truly convincing comparisons. Customers interested in purchasing cloud services are currently unable to utilise a rating and review system that would help them make more informed purchases.

Since Ethernity Cloud operates in a decentralised fashion, a voting and feedback mechanism has been incorporated. Customers can now provide enterprises with direct feedback. A more competitive and diverse market for cloud services is the result of the system's decentralised structure, which permits service providers and developers to set prices for their services based on the quality of those services. The rating system is supported by technical statistical evidence, ensuring that it is not susceptible to abuse or malevolent evaluations.

Utilising blockchain technology results in a more objective and transparent rating system. This flexibility allows service purchasers to pursue either short-term or long-term cost savings. Depending on their ultimate objectives, they may prioritise services with slightly lower performance or those with a higher price but significantly superior results.

POLYGON SDK AND ETHERNITY CLOUD AS PROTOCOL ON POLYGON:

The POLYGON SDK is an open-source framework for building protocols on top of Polygon, within which ETHERNITY CLOUD leverages its proprietary solution.

Its modular structure provides heavily tested and fully customizable components that firmly bootstrap the main use case of the ETHERNITY CLOUD token for the advocated solution. POLYGON breaks the barriers between Blockchains by allowing them to communicate with each other in a decentralized way. Its features include scalability, modularity (consensus,

network, and application layers) and interoperability. POLYGON SDK is safe thanks to the improvements in the aftermaths of many stress-testing sessions, even if one-third of all nodes are malicious.

ETHERNITY CLOUD'S BUSINESS MODEL

The ETHERNITY CLOUD Ecosystem will offer to the market the following business solutions focusing on:

- Creating an equitable and level playing ecosystem where everyone's right to privacy is completely protected and the blockchain itself guarantees data integrity.
- Innovative method to protect data during transfers at any given moment.
- Empowering users to run cloud computing activities over the decentralized network while maintaining complete control over the confidentiality and reproducibility of the process at the lowest costs available in a given second on the built ecosystem.
- Mitigating to aiming at the abolition of 'insider threats' that lead to data leaks.
- Making available confidential cloud computing services at low costs worldwide.

The Issuer aims to enhance this industry by building the grounds for a futuristic vision of the cloud that includes three essential characteristics: high integrity, confidentiality, and continuous availability.

Leveraging blockchain technology, the mission is to create a decentralized ecosystem that enables the execution of conventional cloud software as decentralized cloud applications. The nodes within Ethernity Cloud are location-agnostic, self-replicating, and continuously proliferating across the internet without user interaction, as specified in the Ethereum-compatible smart contract.

ETHERNITY CLOUD puts emphasis on the following competitive advantages to build the business model around these pillars:

a) Decentralized and High integrity

By removing intermediaries, Ethernity Cloud offers a trustworthy, cost-effective, and dependable solution that empowers regular users. They will be able to monetize inactive computing resources and join the public infrastructure for fog computing.

b) Private

By encrypting data at all levels, user information is always protected at rest and in transit. Using a trustless model, the software implements privacy and security controls that give content proprietors peace of mind.

c) Confidential

In a decentralised setting, confidentiality is the determining factor for the appropriate level of privacy.

Ethernity Cloud has confidentiality as one of its strong pillars because we have a comprehensive understanding of the need for confidentiality when operating cloud computing applications.

d) Available

The decentralised design offers numerous benefits; however, availability is problematic.

As a result, it became our mission to facilitate the adaptation and development of decentralised applications that operate seamlessly and offer continuous availability.

CIRCULAR ECONOMY AS THE NORTH STAR OF ETHERNITY CLOUD

The dawn of the digital age has arrived, and we are convinced that the circular economy is a beneficial concept for society. There are already a scattering of highly successful initiatives employing the circular economy model. The core team of the Issuer believes that the circular economy is a socially beneficial concept.

Without Ethernity Cloud, it is not possible for users to monetize their inactive processing capacity and storage space, so the ecosystem makes a significant contribution to the concept of a circular economy. The decentralised nature of the solution not only reduces the overall cost of cloud services but also further diversifies the market for cloud services.

Ethernity Cloud users can serve as both service consumers (cloud users) and service providers (miners). Ethernity Cloud users can easily recoup the costs associated with hosting their decentralised cloud applications and content by renting their spare hardware to other Ethernity Cloud users.

As a result, all Ethernity Cloud users will be able to host their cloud applications and content online for an infinite period of time. This will not require a high level of technical skill and will be supported by a reliable blockchain contract.

To incentivize network administrators, the Ethernity CLOUD smart contract offers service providers stake incentives.

ETHERNITY CLOUD'S BLOCKCHAIN

The Issuer is developing a protocol that leverages the proprietary Blockchain of POLYGON based on the POLYGON SDK. The first stage of this protocol utilized the technology provided by Bloxberg in the shape of their own blockchain.

A. Bloxberg

Bloxberg is the world's first blockchain consortium focused on research and academic applications. Bloxberg is the greatest Proof-of-Authority (PoA) network in the world, operated exclusively by research institutions.
Bloxberg's mission is to advance science with its own blockchain infrastructure and enable society to secure data using the reputational proof of research organisations worldwide.

The Bloxberg Association facilitates and accelerates the decentralised blockchain bloxberg and scientific applications that operate on top of it.

The primary activities of the Bloxberg Association consist of the following:

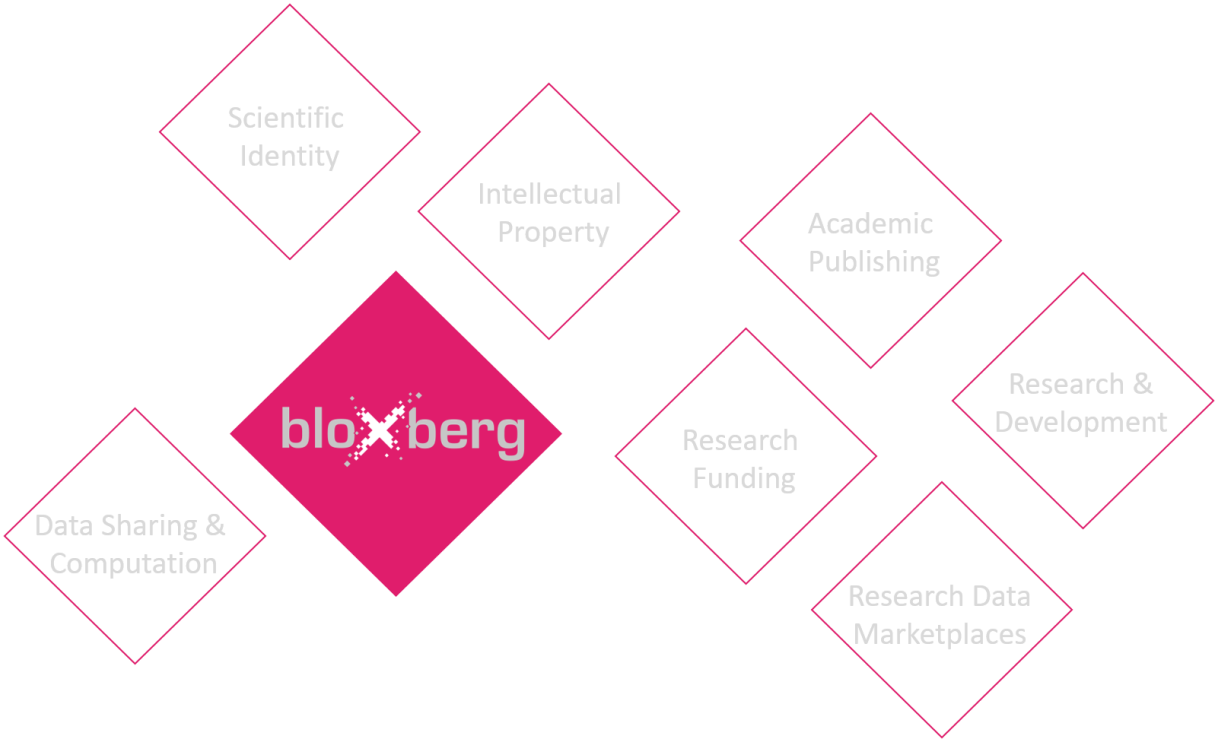
- a consortium of international research institutions specialising in blockchain technology;
- the operation and further development of the bloxberg blockchain;
- the promotion of exchange among the scientific blockchain community;
- the establishment and strengthening of international contacts;
- the exchange of experiences between science, business, technology, administration, and the judiciary.

Workflow on the Bloxberg blockchain - validation, transactions, block creation, and decentralised applications

Bloxberg Association is comprised of research institutions that operate nodes. Each research institution will only be permitted to operate a single authority node on the network. The association is responsible for the operation and maintenance of the network's underlying infrastructure. The comprehensive Bloxberg governance model specifies all rights and obligations.

Third parties, association/consortium members, and scientists, among others, can develop decentralised applications operating on top of Bloxberg. The bloxberg Association encourages the development of scientific ecosystem-beneficial applications.
Through the bloxberg API, Scientific dApps communicate with the bloxberg blockchain in order to provide services to researchers and scientists.
The bloxberg consensus is governed by an algorithm for Proof of Authority. This algorithm was selected based on its dependability, accessibility, efficacy, and prior use in large networks.

A comprehensive audit of the protocol is available for review. As a last clarificatory note, a permissioned implementation of Ethereum forms the basis of the blockchain itself.



Lastly, all validators are known in the network for transparency.

The bloxberg validators' real-time overview can be found here: https://validators.bloxberg.org/

The bloxberg bootnodes overview can be found here: https://github.com/bloxberg-org/bloxbergBootnodeSetup/blob/master/bootnode/bootnodes.txt

The bloxberg infrastructure

The bloxberg network is based on a public, permissioned implementation of Ethereum, featuring smart contract functionalities and using the network of nodes from the bloxberg association. Bloxberg runs on the Ethereum Istanbul Upgrade.

As previously stated, the bloxberg consensus is governed by Proof of Authority (PoA) based on the Authority Round (AuRa) algorithm. This algorithm was selected by the developers within bloxberg based on consistency, availability, performance, and previous use in large networks.
A detailed protocol audit is available for review:
https://github.com/poanetwork/wiki/wiki/Aura-Consensus-Protocol-Audit.

A PoA consensus algorithm is not dependent on nodes arbitrarily solving difficult mathematical problems (mining), but instead uses a set of "validators" – nodes that are explicitly allowed to create new blocks and secure the blockchain (in bloxberg called Validator nodes). The chain must be signed off by the majority of Validator nodes, in which case it becomes a part of the permanent record (finalization). Finality in AuRa is defined by a simple majority vote. Finality is reached when at least 51% of all Validator nodes signed the same chain twice. Some advantages of a PoA consensus compared to a PoW consensus:

- Increased security (a node which is not registered as a Validator node or a hacked Validator node cannot overwhelm the network, potentially reverting all transactions)
- less computationally effort (no mining required)
- more performant (Aura consensus provides lower transaction acceptance latency)
- more predictable (blocks are issued at steady time intervals)

The bloxberg Validator nodes utilize the Ethereum Client Nethermind: https://github.com/bloxberg-org/bloxbergValidatorSetup-nethermind.

Certification & Verification of data

The bloxberg network provides the functionality of minting a batch of data objects or singular objects a non-fungible ERC721 token. Each contract MUST include the ERC721 Metadata standard augmented with an additional field that contains a unique, cryptographic identifier of the bloxberg Research Object Certificate(s) included in the minting transaction.

This process ensures that the research object certificate(s) can be resolved to an on-chain transaction, thereby guaranteeing data integrity and provenance without disclosing sensitive information, if desired (see Blip research certificate).

The cert-issuer API issues blockchain certificates by creating a transaction from the issuing institution to the recipient on the Ethereum blockchain that includes the hash of the certificate itself.

The certification and verification service is accessible via the included links available on this bloxberg page provided on their website under the section 'Developers Hut – Documentation': https://bloxberg.org/developers-hut/#documentation.

At the time of writing this Whitepaper, bloxberg mentions Ethernity Cloud as an external application on the following section: https://bloxberg.org/apps/external-dapps/.

B. Polygon

For the next stage of ETHERNITY CLOUD's development and the token conversion, the ERC-20 standard will be used to establish the first version of the ECLD Token.

At a later stage of the ETHERNITY CLOUD project and if the community considers it necessary, ECLD Tokens will be migrated to the proprietary Blockchain solution of the Issuer, which might be developed in the future. However, a proprietary blockchain is not part of the roadmap at the moment.

The migration process through the Bridge is described in Section IV - ETHERNITY CLOUD'S PROTOCOL BASED ON EVM.

TOKEN ECONOMY

The ECLD Token is the digital cryptocurrency of the ETHERNITY CLOUD Ecosystem, reflecting the network's value and crucial for the proper functioning of the underlying technology. It is a virtual financial asset under the VFA Act of Malta with an internal main functionality and value proposition strictly related to the ecosystem built by Ethernity Swap Ltd.

ECLD Tokens are used as:

- a settlement method for goods and services offered on the ETHERNITY CLOUD Ecosystem;
- rewards for nodes securing the network;

For a detailed description of the token economy, please see Section V - ECLD TOKEN ECONOMY.

ETHERNITY CLOUD'S ROADMAP

Q4 2017: The first whitepaper of ETHERNITY CLOUD is published.

Q1 2018: ETHERNITY CLOUD offers the first demo.

Q1 2020: Launch of the so-called Proof-of-Execution consensus mechanism on bloxberg's blockchain.

Q4 2020: ETHERNITY CLOUD launches the Testnet.

Q2 2021: ETHERNITY CLOUD closes the Private Round and open the Pre-Sales Round within the community.
Q3 2021: Sale of ETNY Tokens within the community opens.

Q2 2022: Launch of the Ethernity Cloud's ETNY Wallet.

Q3 2022: ETHERNITY CLOUD launches the ETNY Staking dApp, Smart Contracts, the Etherneals NFTs.

Q4 2022: Testnet update takes place and the Jupyter Notebook launches.

Q1-2 2023: ETHERNITY CLOUD includes two main features in the shape of data integrity and data confidentiality via SecureLock Enclave, TrustZone Enclave, and SwiftStream File Service; The Node.js template is released; Smart Contract Optimisations are performed; and the Etherneals NFTs are launched. New website launches.

Q3 2023: ETHERNITY CLOUD launches OpenBeta on 12-13 July and the Mainnet on bloxberg

Q4 2023: ETHERNITY CLOUD seeks to register its Whitepaper in accordance with the VFA Act of Malta once the home regulator (MFSA) approves it.

An updated Smart Contract Compliance audit is performed.

Process confidentiality is integrated into the proposed solution via PrivateSphere.

Mainnet on bloxberg (three types of migration: contract migration, network migration, and application migration).

ETHERNITY CLOUD considers targeted exchange listing of the ECLD token as VFA under the VFA Act of Malta upon the successful registration of this Whitepaper.

Swap dApp launched on 20 November.

ECLD token listing on the first regulated centralized exchange from the BVI.

Q1-2 2024: ETHERNITY CLOUD launches decentralized DNS. Pending approval of the ECLD token as VFA under the VFA Act of Malta from the MFSA.

Q2-3 2024: ETHERNITY CLOUD SDK and two other decentralized applications launch.

TOKEN CONVERSION – NOT AN INITIAL VFA OFFERING

Disclaimer: This is not an initial VFA offering but a token conversion from ETNY to ECLD tokens.

The previous round of funding

The Issuer has decided to explicitly not pursue an IVFAO from or within Malta, thereby registering the Whitepaper with MFSA in order to lawfully seek listing admission on DLT exchanges of the ECLD token as a VFA under the VFA Act of Malta with the aim of reaching its goals, as further outlined in this Whitepaper.

This registration of the Whitepaper is not meant to be deemed as a capital raise proposal but a sign of integration with the overall crypto-assets market and a method to satisfy the

community's necessity to exchange the tokens between interested Tokenholders to access the services provided by Ethernity Swap Ltd.

The exchange shall only occur on the secondary market in a trustworthy and secure environment provided by third-party DLT exchanges that are duly authorized and fully compliant with national, European, and international standards.

Ultimately, Tokenholders bear the full responsibility to research and verify beforehand the DLT exchange to engage with for the purpose of conducting transactions on trading venues.

In Q3 2021, Ethernity Cloud conducted a public sale to the inside community of the protocol at stake. The supply of tokens was 15% of the total token supply.

Reasons behind the ECLD token conversion and its Whitepaper

ETHERNITY CLOUD is publishing this Whitepaper with the ultimate aim of accessing capital through the crypto-assets allocated in the treasury of The Issuer by seeking admission on a trading venue (i.e., DLT exchanges) of various crypto-assets (e.g., VFAs, virtual tokens, utility tokens, other crypto-assets) to list the ECLD Token in different pairs as established by the third-party authorized DLT exchange at stake (or Crypto-Asset Service Provider as per the MiCA definition).

The rationale behind is multi-folded and the ECLD token shall help the Issuer to:

- Continue the development of the ETHERNITY CLOUD Protocol and the underlying technology for the seamless accommodation of new participants to the ecosystem; capital obtained through the sale of ECLD tokens will be used for R&D, software and product development, human resources, acquisition of the necessary hardware and software, market research, product maintenance, and similar expenses and costs related to the development of the ETHERNITY CLOUD Ecosystem and its underlying technology;
- Cover expenses related to advising, marketing and sales of ETHERNITY CLOUD's products, as well as expenses related to investor relationships;
- Cover other operational expenses and costs as the business may face.

- To ensure that the ECLD Token circulation within the DLT-based solution at stake is exchangeable and accessible to a large public on one or more DLT Exchanges to ensure availability of ETHERNITY CLOUD services to the users and node operators;
- To provide remuneration opportunities for fundamental members of the network, such as the node operators who fairly put in the required efforts and resources to validate transactions with integrity, given that these entities will receive ECLD tokens as rewards;
- To ensure full transparency and compliance with European and Maltese regulations to protect investors' interests and health of the ecosystem;
- Admitting to trading of the ECLD Token on one or more DLT Exchanges (or CASPs under MiCAR) to facilitate secondary market trading of the ECLD Token.

Initial VFA Offering structure:

1. Private sale (private placements) – NO PRIVATE SALE ANYMORE AT THE PUBLISHING TIME
2. Token conversion (swap) and migration to POLYGON through burning and minting via Smart Contract Bridge

TOKEN CONVERSION: SOFT AND HARD CAPS

There is virtually no soft, nor hard cap because this operation and the purpose of this Whitepaper is not to announce the IVFAO of the ECLD token but its mere conversion from ETNY tokens already issued on bloxberg to ECLD tokens issued on POLYGON. All the ETNY tokens to be converted into ECLD tokens were issued prior to this moment and there is absolutely no possibility in the future to supplement the amount of ETNY, nor ECLD tokens.

NB: For the purposes of the legal requirement to mention such caps under the VFA Act's First Schedule, the sections below will refer to this operation consisting of token conversion as IVFAO.

IVFAO Soft Cap

The Issuer has established a Soft Cap for this token conversion of 10,000,000 (ten million) ECLD Tokens, which represents 1% of the maximum supply circulating of ETNY tokens.

The Issuer shall provide an undertaking to source alternative funding in order to meet its minimum working capital requirements to continue to finance the Issuer's business growth in the event that the funds raised by means of the IVFAO and Private Sale are not sufficient to meet such minimum working capital requirements.

The Issuer undertakes to refund the issuing value of the ECLD Token paid on subscription by the Participants in the event that the IVFAO Soft Cap is not reached by the end of the Initial VFA Offering. Once the IVFAO Soft Cap is reached, and notwithstanding the fact that the subscription period of the IVFAO may not have expired yet, the Issuer shall be free to start utilizing the proceeds collected from the sale of ECLD Tokens through the IVFAO as prescribed in the section regarding the rationale behind this Whitepaper.

IVFAO Hard Cap

The Issuer has established the IVFAO Hard Cap set as a maximum amount of ECLD Tokens to be allocated for sale during and for the purposes of the IVFAO in accordance with Section V.4 - TOKEN ALLOCATION.

The summary of the allocation can also be observed in the EXECUTIVE SUMMARY.

Concerning Section V.4 – TOKEN ALLOCATION, the IVFAO Hard Cap is 1,000,000,000 (one billion) ECLD tokens. This is the current maximum supply minted on bloxberg to migrate on Polygon in the shape of ECLD token after burning through the Smart Contract Bridge. Thus, the conversion is 1:1 (ETNY:ECLD).

Prospective Market Participants who wish to acquire ECLD Tokens through the services of an intermediary, such as a DLT Exchange, should also take into account that a lower hard cap on ECLD Tokens may apply when acquiring through such intermediary.

As a relative remark, the Issuer appreciates that the value of the token is to be proportionate of the additional improvements made to the protocol as stated in the roadmap. Ethernity Cloud puts forward this statement for the community and it is based on the expert opinion of the development team.

Nevertheless, please be aware that this statement shall not be interpreted in the sense that the ECLD token derives its value from the improvements carried on and brought into the ecosystem by the core team of the Issuer. The token shall exclusively base its value as deemed by the community and traders on the secondary market by virtue of supply and demand and utility of the ECLD token within the ecosystem provided and maintained by Ethernity Swap Ltd.

Life-cycle of the Initial VFA Offering

Q4 2023 – submission of application for registration of the Whitepaper and the start of Token Conversion of ECLD Tokens

Q4 2023 – Commencement of the listing on DLT Exchanges that are duly authorized in their Home State and prove to be compliant with EU or International Standards

Note: The conversion of the tokens is available for 5 years after 20 Novemeber 2023, which marks the start of the swap dApp also known as the so-called token conversion of ETNY to ECLD tokens at stake. Given that the conversion is carried out through a Smart Contract with pre-determined conditions and parameters, the Issuer has no power to modify the program, which could result in effects that are in the detriment of the other market participants. Thus, this is a hard deadline for all Tokenholders with regards to the open timeframe for conversion. No other Smart Contract will be deployed for such purposes.

Methods of payment

BTC, ETH, MATIC, and in case of acquiring ECLD Tokens through the services of an intermediary authorized for such purpose by or together with the Issuer, any other currencies, whether virtual or otherwise, accepted by such intermediary after the due diligence process

(including KYC) was performed on the market participants. The payment methods apply to the exchange of tokens on the secondary market, or private exchanges between Tokenholders. These methods do not concern any IVFAO.

NOT a public sale of ECLD Tokens – NOT IVFAO

The Issuer is not planning a public sale of ECLD Tokens in the form of a traditional IVFAO. The only operation to be executed is a token conversion that is 1:1 between ETNY:ECLD tokens.

Geographical restrictions

The ETHERNITY CLOUD Website, including the mechanisms used for the token conversion and ECLD Tokens, are not explicitly offered by the Issuer for use to natural and legal persons having their permanent residence or their seat of incorporation in the following countries: Germany, USA, Puerto Rico, US Virgin Islands, Canada, China, Singapore, Afghanistan, Central African Republic, Cuba, Democratic Republic of the Congo, Eritrea, Iran, Iraq, Libya, North Korea, Russia, Somalia, South Korea, South Sudan, Sudan, Yemen, Zambia (Restricted Areas).

Should natural persons have any of these nationalities, the individual will not be directly discriminated against, nor rejected in a definitive manner.

However, the individual in this scenario is redirected to the enhanced due diligence process (EDD) and is entitled to prove (s)he resides in a permitted jurisdiction by providing a valid identification document (e.g., passport, National ID card, electricity bill, phone bill) in line with PRADO, which is an authorized and up-to-date online register maintained by the European Council.[7]

Pursuant to the validation of the adequate residence, the individual may proceed accordingly.

[7] European Council, 'PRADO' <https://www.consilium.europa.eu/prado/en/search-by-document-country.html> accessed on 27 April 2023.

Experienced Investors

ETHERNITY CLOUD shall treat a Participant as an Experienced Investor if such Participant declares that:

- they have already participated in other offerings of VFAs;
- they have invested in VFAs over 10,000 EUR or its equivalent; and
- they possess the necessary experience, knowledge, and expertise to make their own investment decisions and properly assess the risks involved.

ETHERNITY SWAP Ltd shall also treat the following as Experienced Investors:

- entities which are required to be authorized or regulated to operate in the financial markets;
- large undertakings meeting two of the following size requirements on a company basis:
    - balance sheet total: 20,000,000 EUR, ○ net turnover: 40,000,000 EUR, ○ own funds: 2,000,000 EUR;
- national and regional governments, public bodies that manage public debt, Central Banks, international and supranational institutions such as the World Bank, the IMF, the ECB, the EIB, and other similar international organizations;
- other institutional investors whose main activity is to invest in VFAs, including entities dedicated to the securitization of assets or other financing transactions.

Furthermore, ETHERNITY CLOUD shall treat a Participant as an Experienced Investor in the event where the following criteria are cumulatively satisfied:

- the Issuer will undertake an adequate assessment of the expertise, experience and knowledge of the Participant, and this assessment gives reasonable assurance, in the light of the nature of the transactions or services envisaged, that the Participant is capable of making their own investment decisions and of understanding the risks;
- in the course of the assessment referred to in the point above, as a minimum, two of the following criteria shall be satisfied:

- the Participant has carried out transactions, in significant size, on the relevant market at an average frequency of 10 per quarter of the previous four quarters,
- the size of the Participant's Virtual Financial Asset portfolio, defined as including cash deposits and Virtual Financial Assets, exceeds 500,000 EUR or its currency equivalent,
- the Participant works or has worked in a position, which requires knowledge of the transactions envisaged,
- the Participant has worked in the financial sector for at least one year in a professional position;

- the following procedure is followed:
  - the Participant shall state in writing to the Issuer that they wish to be treated as an Experienced Investor,
  - the Issuer will give such Participant a clear written warning of the protections and investor compensation rights they may lose, and
  - the Participant will state in writing in a separate document from the contract, that they are aware of the consequences of losing such protections.

Token allocation

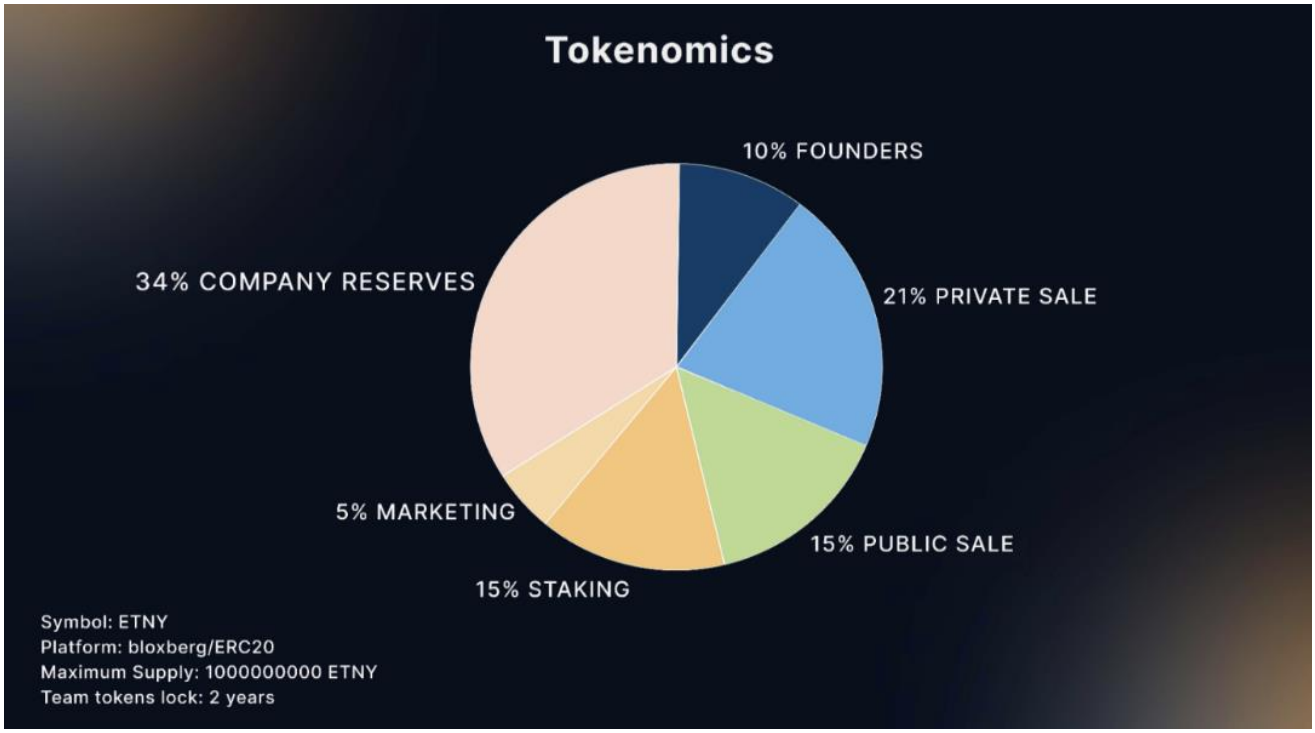


Figure 2: Distribution of ETNY Tokens

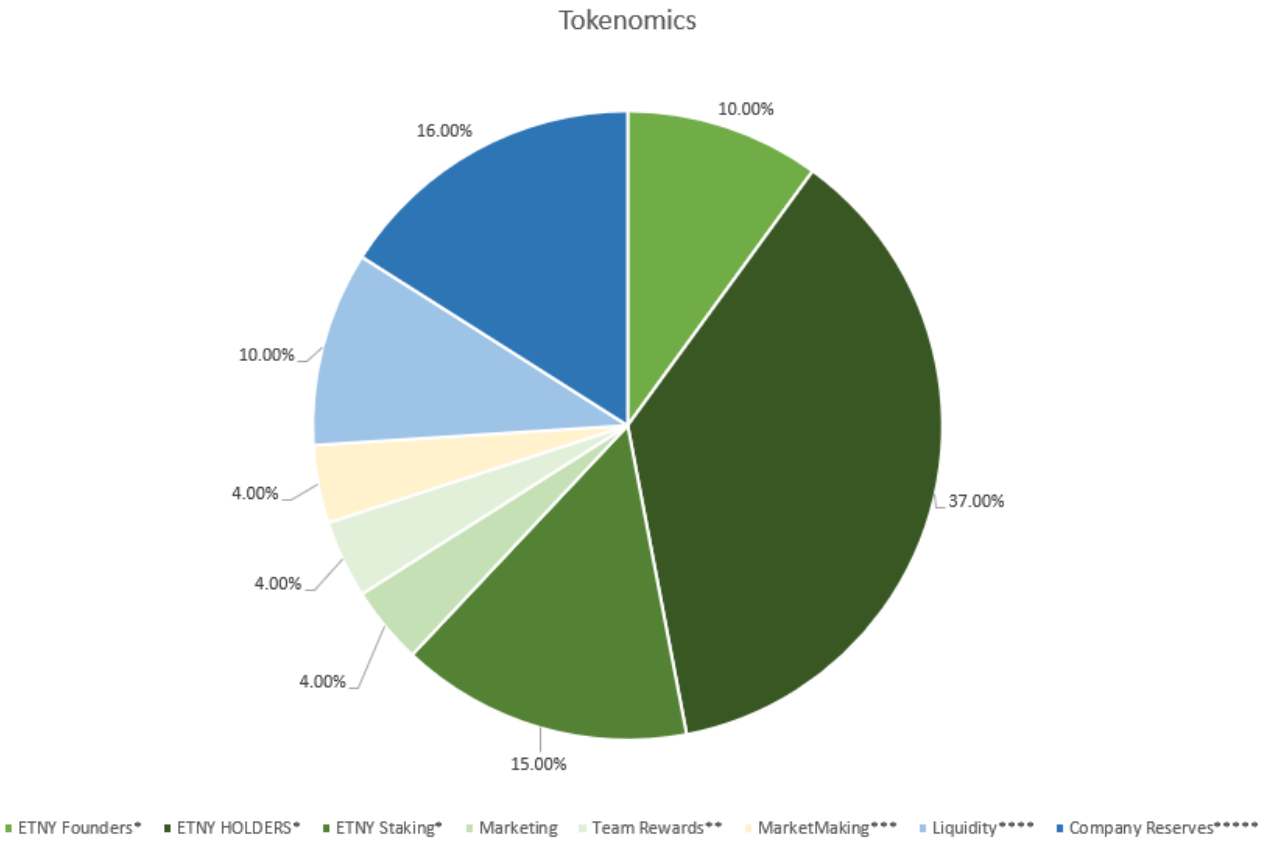


Figure 3: Distribution of ECLD TOKENS

**These tokens will be minted as corresponding ETNY tokens are passed through the bridge.*

***Team rewards will progressively unlock across 4 years.*

****Liquidity provided to MarketMaker to protect the financial stability of the ecosystem.*

***** In case of hardship, additional liquidity may be infused on case-by-case analysis.*

******Company reserves are locked for 3 years.*

RISKS

ETHERNITY CLOUD is burdened with inherent risks as every project and every other VFA opportunity.

Every Participant in the Token Conversion to be named a Tokenholder shall carefully consider all the RISKS included in this Whitepaper before making any decision on acquiring or taking part in the token conversion of ETNY tokens into ECLD Tokens, and further participating in the ecosystem at stake.

Should the Tokenholder accept and duly understand the underlying risks, the Tokenholder shall bear the risks in an unequivocal, freely, and voluntarily manner by way of taking a positive action (i.e., converting the ETNY tokens into ECLD tokens as described in the Conversion Flow), which forms the valid consent of the person.

II. RISKS

The following is a non-exhaustive disclosure of principal risk factors which are considered to be material by The Issuer in connection with the IVFAO and the acquisition, holding and/or use of the ECLD Token, as well as, to the extent applicable, the use of the ETHERNITY CLOUD Ecosystem at any moment in time. Participants should consider these risk factors alongside all other information provided in the Whitepaper and are advised to consult with their professional advisers (including their financial, accounting, legal, tax, technical, or other advisers and experts) before deciding to obtain ECLD Tokens.

In addition, Participants should be aware that the risks described herein may combine and thus intensify one another. The Issuer believes that the following risk factors may even affect its own business, as well as any external valuation of the ECLD Token (which external valuation is beyond the scope and purpose of the reason behind the ETHERNITY CLOUD Ecosystem and The Issuer’s business). Most of these risk factors are contingencies that may or may not occur, and The Issuer is not in a position to predict the likelihood of such contingencies

occurring. By acquiring, holding, and using ECLD Tokens, the Participant expressly acknowledges and assumes the following risks:

General suitability of the token acquisition

The acquisition of ECLD Tokens is only suitable for financially experienced persons who are capable of conduction a proper evaluation of the merits and risks of such an acquisition, or other persons who have been professionally advised concerning the token acquisition and who have sufficient financial resources to be able to bear any losses that may arise from there (which may be equal to the whole amount spent in connection with the token acquisition). Such an acquisition should not be seen as an investment, nor a financial asset. ECLD token is a utility token and qualifies as VFA under the laws of Malta.

Bear in mind that ECLD tokens may not be acquired from The Issuer anymore as this Whitepaper describes a token conversion from ETNY to ECLD tokens.

Risk of losing access to ECLD Tokens due to loss of Private key/s, Custodial Error, or Participant error

A Wallet is necessary to acquire, hold, and dispose of ECLD Tokens. The Participant hereby understands that he is responsible for setting up the Wallet with a third-party provider to hold ECLD Tokens, and he is responsible for implementing reasonable measures for securing the Wallet. Ethernity Cloud provides the ecosystem participants with its proprietary Wallet.
Accordingly, loss of requisite private key/s associated with the Wallet holding ECLD Tokens will result in loss of such ECLD Tokens and any other cryptocurrencies and/or tokens held within.

Moreover, any third party that gains access to such private key/s, including by gaining access to login credentials of the Wallet that the Participant uses, may be able to misappropriate the

Participant's ECLD Token. Any errors or malfunctions caused by or otherwise related to the Wallet that the Participant chooses to receive and hold ECLD Tokens, including the Participant's own failure to properly maintain or use such Wallet or caused as a result of the choice of third-party provider for the Wallet, may also result in the loss of ECLD Tokens.

Additionally, the Participant's failure to follow precisely the procedures set forth in the Terms for acquiring and receiving ECLD Tokens, including, but not limited to, the provision of the wrong Wallet address for receiving ECLD Tokens, may also result in the loss of ECLD Tokens.

Risk of mining attacks (Only before the Merge)

In the past before the Ethereum Merge, mining attacks were inherent risks because of the PoW consensus mechanism. However, Ethereum and Polygon work on the basis of PoS consensus mechanism, which incentives further decentralization and seriously mitigates a takeover control over the network since nodes (validators) are highly unlikely to coordinate a hostile action over the network distributed globally. Thus, PoS decentralized the Ethereum, ERC-20, Polygon and other protocol built on top of these blockchains in a manner that democratizes the DLT at stake.

Other decentralized cryptographic tokens based on the ERC-20 token standard are susceptible to attacks by miners in the course of validating transactions on the Ethereum Blockchain, including, but not limited to, double-spend attacks, majority mining power attacks, and selfish-mining attacks.

Therefore, Ethernity Cloud is unlikely to be exposed to such attacks unless an overriding majority of nodes cooperates and coordinates a malicious attack against the protocol's distributed ledger. The standing opinion of the Board is that this is unprecedented, unpredictable, and unlikely to occur since the past months proved exponential growth in the number of nodes running on Ethernity Cloud's infrastructure.

Risk of network attack

After the migration to Polygon based on the POLYGON-SDK, ECLD tokens are susceptible to network attacks.

There is a minor risk of "Nothing at Stake" problem and the issue of the majority of voting rights. In "Nothing at Stake" problem, the network validators may find themselves in a situation in which they have nothing to lose by making malicious decisions through voting (e.g., by dividing the network), thereby preventing a consensus from being achieved or manipulating its operation. ETHERNITY CLOUD utilizes both slashing protocol and economic incentives to ensure the mitigation of "Nothing at Stake problem".

The other risk of a network attack is the risk of one entity obtaining the majority of voting rights that may lead to arbitrary decisions in the block creation process. Nevertheless, this is highly unlikely to occur because of the infrastructure and overall mission of Ethernity Cloud. The network is properly decentralized at the time of writing and its growth in the number of nodes will only lead to a better spread of the validators.

With a PoS, the attacker would need to obtain the majority of the ECLD Tokens to carry out a network attack. The Proof of Stake makes it disadvantageous for a Tokenholder with a majority stake in a DLT Asset to attack the network. Although it would be difficult and very expensive to accumulate the necessary majority of the ECLD Tokens, a Tokenholder with a majority stake in ECLD Tokens would not have it in his best interest to attack a network of which he holds a majority stake. If the value of the VFA decreases or even plummets, this means that the value of his holdings would also fall. Thus, the majority stake owner would be even more incentivized to maintain a secure network.[8]

[8] Jake Frankenfield, "What Does Proof-of-Stake (PoS) Mean in Crypto?" (Investopedia, May 2023) <https://www.investopedia.com/terms/p/proof-stake-pos.asp> accessed on 20 July 2023.

Risk of hacking and security weakness

Hackers or other groups or organizations may attempt to interfere with ECLD Tokens in several ways, including, but not limited to, denial-of-service attacks, Sybil attacks, spoofing, smurfing, malware attacks, consensus-based attacks, and any such similar events which could have an impact on ECLD Tokens, the ETHERNITY CLOUD Ecosystem and the services The Issuer may offer from time to time.

Next to that, Tokenholders are at phishing risks due to the email addresses or social media accounts based on their public character and the opinions the spread on such digital environments or forums.

The malware used on the link emailed to get access to their personal data could also provide access to the Ethernity Cloud Wallet (or others akin to it) of the Tokenholder's patrimony might lead to loss of funds or even spoofing (and other innovative attacks) on the network.

To mitigate such risks, Tokenholders bear the responsibility to protect their Wallets and personal data in the most effective manner available on the market.

Risk of security weakness in the confidential computing technology (SGX,SEV,TrustZone)

Confidential Computing technology that uses Trusted Execution Enclaves relies on hardware Chipsets to protect the data confidential during use. Previously they were reported various theoretical circumstances where the data could be leaked by using attacks such as to side channel attacks. The chipset manufacturers heavily optimize the performance of their CPUs while trying to maintain a proper security for confidential computing functions, however considering very small possibilities, it could be the case that the information can be decrypted by unknown parties with access to vulnerable CPUs before the chipset manufacturer can take measures.

Risk of a security weakness in the Smart Contract, the Website and ECLD Tokens source code or any associates software and/or infrastructure

There is a risk that the Smart Contract, the Website, the ETHERNITY CLOUD Ecosystem, and ECLD Tokens may unintentionally include weaknesses or bugs in the source code interfering with the use of, or causing the loss of, ECLD Tokens; the source code of the Website is open and could be updated, amended, altered, or modified from time to time.

The Issuer is unable to foresee or guarantee the precise result of an update, amendment, alteration, or modification. Hence, any update, amendment, alteration, or modification could lead to an unexpected or unintended outcome that adversely affects ECLD Tokens and/or the ETHERNITY CLOUD Ecosystem or the Website. As an outcome, ECLD Tokens may be lost.

Risk of no listing or low/no liquidity

Even though there are currently online services available which enable an exchange of cryptographic tokens with other such tokens, or even enable the exchange of cryptographic tokens for fiat money, there are no warranties and/or guarantees that ECLD Tokens will be made available for exchange with other cryptographic tokens and/or fiat money.

No guarantees are given whatsoever concerning the capacity and/or volume of such exchange/s. Such exchange, if any, might be subject to poorly understood regulatory oversight, and The Issuer does not give any warranties regarding any exchange services providers. Users, including the Participant, if applicable, might be exposed to fraud and failure affecting those exchanges.

Risk of no secondary market

The Issuer has designed specific mechanisms that aim to mitigate the risk of insufficient liquidity by supporting the demand side of the market. For instance, the Issuer engaged in

agreements with specialized and regulated liquidity providers active on secondary market and on multiple DLT exchanges to support liquidity for the ECLD token.

Nevertheless, the market for ECLD Tokens may be low in terms of liquidity, especially in the beginning, and a Tokenholder may find it more difficult to identify willing buyers for their ECLD Tokens.

The existence of a fairly, orderly, and liquid market depends on a number of factors. Accordingly, there can be no assurance that an active secondary market for ECLD Tokens will develop, or if it develops, that it will continue.

Lastly, there can be no assurance, nor strict sense guarantee that a Tokenholder will be able to sell or otherwise trade in the ECLD Tokens.

Risk of an eventual unfavorable fluctuation of ECLD Tokens' value

The ETHERNITY CLOUD Ecosystem is intended to be financially self-sufficient and self-financing after the Private Sale and listing the ECLD token on multiple DLT exchanges. The Issuer commits to have no specific interest in the market value of ECLD Tokens.

Thus, the Issuer considers that it shall not be affected by unfavorable fluctuation of ECLD Tokens' value.

On the other hand, Tokenholders are subject to such risk of eventual unfavorable fluctuation of ECLD Tokens' value as the price of ECLD Tokens may vary over time due to a number of factors affecting the value of Tokenholders' portfolios.

In addition to the usual market forces, there are several potential events that could exacerbate the risk of unfavorable fluctuation in the value of ETH or ECLD Tokens, including significant security incidents or market irregularities at one or more of the significant cryptocurrency exchanges.

Risk of malfunction in the Ethereum or Polygon network or any other Blockchain and of competing platforms

ECLD Tokens could be interacting with malfunctions unfavorably, including, but not limited to, one that results in the loss of ECLD Tokens or prevents their use on the ETHERNITY CLOUD Ecosystem.

It is possible that alternative platforms could be established that utilize the same open-source code and protocol underlying the ETHERNITY CLOUD Ecosystem and attempt to facilitate services that are materially similar to the ETHERNITY CLOUD Ecosystem. The ETHERNITY CLOUD Ecosystem may compete with these alternatives, which could negatively impact the ETHERNITY CLOUD Ecosystem, including the utility of ECLD Tokens for the use on the ETHERNITY CLOUD Ecosystem.

Risk of uninsured losses

Unlike bank accounts or accounts at some other financial institutions, ECLD Tokens are uninsured unless the Participant specifically obtains private insurance to insure them.

Thus, in the event of loss of ECLD Tokens or loss of ECLD Tokens' value, there is no public insurer, such as the Investor Compensation Scheme or private insurance arranged by The Issuer to offer recourse to the Participant.

Therefore, this option to insure the crypto assets at stake entirely lies with the Tokenholder, which explicitly means it is his responsibility and obligation to proceed accordingly in this situation.

The risk associated with uncertain regulations and enforcement actions

The regulatory status of DLT Assets and their offering may be unclear or unsettled in many jurisdictions. Hence, it is difficult to predict how or whether regulatory authorities may apply existing regulation concerning technology and its applications, including the ETHERNITY CLOUD Ecosystem and the ECLD Tokens.

Currently, it is difficult to predict how or whether legislatures or regulatory agencies may implement regulatory actions or changes to law and regulations affecting distributed ledger technology, its applications, and DLT Assets, including the ETHERNITY CLOUD Ecosystem and ECLD Tokens.

Regulatory actions or changes to law and regulations could negatively impact ECLD Tokens and the ETHERNITY CLOUD Ecosystem in various ways, including, but not limited to, a determination that the acquisition, holding and use or disposal and transfer of ECLD Tokens constitutes a regulated instrument that requires registration or licensing of those instruments or some or all of the parties involved in the acquisition, contribution, sale, and delivery thereof.

The Issuer may cease operations or interrupt the token sale in a jurisdiction if regulatory actions, or changes to law or regulations, make it illegal to operate in such jurisdiction, or if it is commercially undesirable or no longer viable to obtain the necessary regulatory approval/s to operate or to provide the ETHERNITY CLOUD Ecosystem in such jurisdiction.

Tokenholders shall be aware of the fact that this Whitepaper will also be registered under the Markets in Crypto-Assets Regulation (‘MiCAR’) as soon as the national competent authority implements the adequate application framework. Nonetheless, the Whitepaper registration under MiCAR may also be pursued in a different Member State of the European Union.

Risk of insufficient interest in ECLD Tokens and the ETHERNITY CLOUD Ecosystem

ECLD Tokens and the ETHERNITY CLOUD Ecosystem may stop being used by a large number of individuals, companies, and other entities, or there may be limited interest in the use of ECLD Tokens and the ETHERNITY CLOUD Ecosystem.

Such a lack of use or interest could negatively impact the development of the ETHERNITY CLOUD Ecosystem and, therefore, the potential utility of ECLD Tokens.

Internet transmission risks

There are risks associated with the use of ECLD Tokens, including, but not limited to, the failure of hardware, software, and Internet connections, or other technologies on which the ETHERNITY CLOUD Ecosystem or the use of ECLD Tokens relies.

These types of failures may result in disruptions in communication, errors, distortions, or delays when using ECLD Tokens and the ETHERNITY CLOUD Ecosystem or the Website.

Risk of dissolution of The Issuer

It is possible that, due to any number of reasons, including, but not limited to, a decrease in ECLD Token's utility, the failure of commercial relationships, intellectual property ownership challenges, unfavorable market conditions and added compliance and regulatory obligations, the use of the ETHERNITY CLOUD Ecosystem might no longer be viable to be offered or The Issuer may need to cease trading and be dissolved and liquidated.

However, the Issuer appreciates that these scenarios are highly unlikely because of the unique selling point of the ecosystem and the increasing issue Ethernity Cloud solves.

Risk arising from lack of governance rights

Since ECLD Tokens do not represent or confer any ownership right or stake, share or security or equivalent rights, intellectual property rights or any other form of participation relating to The Issuer, all decisions involving The Issuer will be made by The Issuer at its sole discretion, including, but not limited to, decisions to transfer more ECLD Tokens for use, and to sell or

liquidate The Issuer. These decisions could adversely affect the utility of the ECLD Tokens the Participant holds.

Nevertheless, the Ethernity Cloud's fundamental goal is to involve the community in every decision-making process and milestone in order to properly, adequately, and efficiently decentralize the network by indirectly entrusting the Participants to the protocol with the ultimate controlling power.

Regulatory risks and market risks

The Issuer and its operations are or may be subject to a variety of domestic and/or EU and international laws, regulations, and directives, including those concerning privacy and data protection, consumer protection, data security, and others.

These laws, regulations and directives, and the interpretation or application of these laws, regulations, and directives, could change. In addition, new laws, regulations, or directives affecting the Issuer, the ETHERNITY CLOUD Ecosystem, and ECLD Tokens could be enacted, which could impact the utility of ECLD Tokens and their use on the ETHERNITY CLOUD Ecosystem.

Additionally, the Participants are subject to industry-specific laws and regulations or licensing requirements. If any of the parties fail to comply with any of these licensing requirements or other applicable laws or regulations, or if such laws and regulations or licensing requirements become more stringent or are otherwise expanded, it could adversely impact ECLD Tokens and the ETHERNITY CLOUD Ecosystem, including the ECLD Tokens' utility on the ETHERNITY CLOUD Ecosystem.

The Participant hereby accepts the risk that in some countries, ECLD Tokens might be considered, now or in the future, a security token. In this case, The Issuer gives no representations, warranties, or guarantees that the ECLD Tokens are not considered to be security tokens, securities, financial instruments, or similar medium, in all countries.

The Participant hereby accepts to be solely responsible for the legal, financial, and any other risks connected to ECLD Tokens as a security in his country and to be the only responsible for checking if the holding, using and the disposal of ECLD Tokens is legal in his country.

Besides that, changes in laws, regulations, and directives governing The Issuer's operations, including but not limited to changes to the applicable tax regime or regimes, may adversely affect its business and, consequently, the ETHERNITY CLOUD Ecosystem.

Any change in The Issuer's tax status, or taxation legislation in Malta or elsewhere, could affect the value of its financial holdings, its business, The Issuer's ability to achieve its business objectives and continual commitment to the development of the ETHERNITY CLOUD Ecosystem.

Other inherent risks

The Participant understands and accepts the inherent risks associated with ECLD Tokens, to the extent not covered elsewhere in the terms, including, but not limited to, risks associated with (a) money laundering; (b) fraud; (c) exploitation for illegal purposes; and (d) any other unanticipated risks.

Unanticipated risks

In addition to the risks included in this Whitepaper, there are other risks associated with the Participant's acquisition, holding, and use of ECLD Tokens, including some that The Issuer cannot or may not anticipate. Such risks may further materialize as unanticipated variations or combinations of the risks discussed in the Whitepaper.

The Participant hereby represents and warrants that he will take sole responsibility for any restrictions and risks associated with the holding or use of ECLD Tokens.

If any of the risks mentioned in the terms are unacceptable or the Participant is not in a position to understand them, the Participant should not acquire, hold, or use ECLD Tokens.

Ultimately, the purchasing of the ECLD token and the participation in the token conversion shall be the responsibility of the Tokenholder based on this Whitepaper and personal research on the DLT area, underlying blockchain technologies and utility within Ethernity Cloud's Ecosystem. Hence, the Tokenholder own and bears all the risks associated with the token conversion as well as with the buying, selling, holding, and using of the ECLD token qualified as a VFA under the laws of Malta.

DISCLAIMER:

CERTAIN INFORMATION CONTAINED IN THIS WHITEPAPER CONSTITUTES "FORWARD-LOOKING STATEMENTS", WHICH CAN BE IDENTIFIED BY THE USE OF FORWARD-LOOKING TERMINOLOGY SUCH AS "MAY", "MIGHT", "WILL", "SHOULD", "EXPECT", "ANTICIPATE", "PROJECT", "ESTIMATE", "INTEND", "LIKELY", "UNLIKELY", "PROBABLE", "POTENTIAL", OR "BELIEVE" OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY.

DUE TO VARIOUS RISKS AND UNCERTAINTIES, INCLUDING THOSE DESCRIBED UNDER THE SECTION II - RISKS, ACTUAL EVENTS OR RESULTS OR THE ACTUAL PERFORMANCE OF THE ISSUER MAY DIFFER MATERIALLY FROM THOSE REFLECTED OR CONTEMPLATED IN SUCH FORWARD-LOOKING STATEMENTS.

The forward-looking statements in the Whitepaper include, among others, statements about:

- Issuer's ability to develop the ETHERNITY CLOUD ecosystem to become the industry standard regarding cloud computing and other technological components as described in this Whitepaper;

- Issuer's ability to generate, offer or maintain relatively stable the value of ECLD Tokens.

III. INTRODUCTION TO THE BUSINESS MODEL

1. ETHERNITY CLOUD'S BUSINESS MODEL IN A NUTSHELL

ETHERNITY CLOUD has been created by industry leaders and experts with the mission of reshaping the entire industry of cloud in a manner that decentralizes the activity of cloud computing in order to note rely one central node as it happens in the case of Google Cloud Service. Combining two pioneering technological trends, blockchain and cloud computing solutions, ETHERNITY CLOUD is set to become the leader in providing innovative digitally accessible services and secure storage functions using a user-friendly interface for the ecosystem.

In terms of solutions, Ethernity Cloud is constructing a fair ecosystem in which everyone's right to privacy is completely protected and the blockchain itself guarantees the system's integrity. Your data is safeguarded from cloud service provider abuse, guaranteeing fair, decentralised, and genuinely private operations. Using the ecosystem, users can conduct cloud computing operations over a decentralised network while maintaining full control over the process's secrecy, confidentiality, and reproducibility. Hence, Ethernity Cloud aims to provide users with low operating expenses to keep it accessible to everyone.

To increase our technology adoption rates, we are committed to using open-source, mature, and pervasive technologies that provide a solid and secure base.

Ethernity Cloud's decentralised cloud applications have their basis on conventional cloud applications and software. We endeavour to make the transition to the decentralised cloud as seamless as possible for business users, developers, and enthusiasts of cloud computing.

The ETHERNITY CLOUD Ecosystem will offer to the market business solutions focusing on three areas:

- Smart Contracts on Polygon and Ethereum compatible

  The transactions for cloud computing resources are enforced by smart contracts. This ensures the sellers are getting paid as expected, and the buyers are receiving the resources they paid for.

  The developers looked for a strong and trustworthy blockchain to build on, so the decision was an Ethereum compatible blockchain. Ethernity Cloud considers Ethereum's blockchain a mature enough technology that can run our dApps and smart contracts.

- Next-Gen P2P Network

  Data processed through the decentralized network is encrypted at multiple levels to ensure the highest levels of privacy for the users. This makes Ethernity Cloud an ideal choice for companies and personal use.

- Decentralized Cloud Applications

  Open-source, flexible, collaborative. These words describe the main focus when expanding the community of developers. Decentralized cloud applications developers are the main engine driving Ethernity Cloud.

The Issuer aims to enhance several industries, including, at first, streaming services, cloud services, financial services, including computer-assisted research services. The business model assumes that the solution offered by ETHERNITY CLOUD will be both B2B (ETHERNITY CLOUD as a solution enhancing service distribution for cloud-intensive businesses) as well as B2C (ETHERNITY CLOUD as an open application for the consumers to allow wider B2C and C2C interactions).

After the launch of the MainNet, ETHRNITY CLOUD will initially focus on:

I. Confidential Cloud Computing - further decentralization

In the current model, the ecosystem relies on a Configuration and Attestation Service (CAS). The immediate next steps includes a decentralized version of CAS which can be ran by any operator.

Additionally, steps are planned to introduce validators in the ecosystem, which will validate each result provided by operators and provide a consensus for the proof of eXecution.

II. Developers Network

ETHERNITY CLOUD shall focus on the initial expansion of the network, by increasing adoption for the current ecosystem and onboarding developers to build on top of Ethernity CLOUD.

The medium of settlement accepted in ETHERNITY CLOUD solutions:

- MATIC, BTC and ETH in the beginning of protocol until further notice.
- ECLD Tokens – once the token conversion and the migration to Polygon's Blockchain solution are completed and all the services are up and running, the Issuer will also implement the mechanism for settlement in ECLD Tokens, allowing the Tokenholders to utilize ECLD Tokens as a means of settlement for the services offered on the ETHERNITY CLOUD Ecosystem, which will involve a considerable discount to those Participants paying in ECLD tokens.

In terms of monetization, the Issuer relies on ECLD Tokens that must be used by issuers and node operators to operate the computing tasks and validate transactions. Thus, the financial incentives to ensure the necessary resources will come from the selling of ECLD Tokens on the secondary market, which contributes to the formation of a circular ecosystem where the Issuer releases in circulation a certain number of tokens necessary to be used on the Ethernity Cloud Ecosystem to provide decentralized cloud computing services to consumers and businesses in need.

ETHERNITY CLOUD is not limited only to the currently established strategy. It can have diverse applications in various industries. The Issuer may offer many opportunities to service a variety of business operations across the entire economy.

The business model may suffer modifications throughout the roadmap since the market determines the demand of certain services.
The Issuer will take such information into account in order to scale up the activity accordingly.

2. MARKET OVERVIEW

Please find below an overview of the market size of the main technologies developed and used by ETHERNITY CLOUD.

2.1. BLOCKCHAIN TECHNOLOGY MARKET OVERVIEW

Blockchain is a growing list of records, called *blocks*, that are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. By architecture design, a blockchain is resistant to modification of the data because it is a distributed ledger that records every transaction between two parties and in a verifiable and immutable manner. For use as a distributed ledger, a blockchain is managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all the subsequent blocks, which requires consensus of the network majority.

The Blockchain market is expected to grow rapidly owing to numerous benefits that it provides, such as eradication of the requirement for a financial institution to validate transactions, reduction in duplicative recordkeeping, eliminating reconciliation, minimizing error rates, and facilitating faster settlement. With the use of this technology, many databases could become universal, thereby allowing multiple institutions to use at the same time in order to bring various systems closer together and drastically increase efficiency.

The increasing demand for this technology is visible across various industries, such as financial services, consumer or industrial products, technology, media and telecom, healthcare, transportation, and the public sector. According to figures provided by Statista, the worldwide

blockchain market was valued at 1.57 billion U.S. dollars in 2018 and is forecast to grow more than hundred times to 163 billion U.S. dollars by 2027.[9]

2.2. DECENTRALIZED CONFIDENTIAL COMPUTING MARKET OVERVIEW

Ethernity Cloud aims to create a decentralised, trustless ecosystem for confidential computing with the help of the blockchain. The ecosystem will have node operators as service providers. They will have to meet the hardware requirements and configure their node. The service providers will process data for end users in exchange for ETNY tokens.

The data process will take place in an enclave created for that specific request, making the data and the computation process only accessible to the user who requested it.

Ethernity CLOUD's ecosystem is a much-needed alternative to the current cloud and confidential computing market, due to its reduced cost, high availability, and increased levels of confidentiality.

a) Target Market

According to the Grand View Research website, the market size of cloud computing was valued at USD 483.98 billion in 2022 with a CAGR of 14.1% between 2023 and 2030.[10]

[9] Petroc Taylor, "Blockchain technology market size worldwide from 2017 to 2027" (Statista, 2022) <https://www.statista.com/statistics/1015362/worldwide-blockchain-technology-market-size/> accessed on 20 July 2023.

[10] Grand View Research, 'GVR Report Cloud Computing Market Size, Share & Trends Report Cloud Computing Market Size, Share & Trends Analysis Report By Service (SaaS, IaaS), By End-use (BFSI, Manufacturing), By Deployment (Private, Public), By Enterprise Size (Large, SMEs), And Segment Forecasts, 2023 – 2030' <https://www.grandviewresearch.com/industry-analysis/cloud-computing-industry> accessed 20 July 2023.

The confidential computing market is a relatively new segment of the cloud computing market, witnessing increasing demand due to security initiatives. Confidential computing is in demand in a number of sectors including healthcare, banking, and financial services due to the sensitive information that these sectors work with on a daily basis.[11]

The Confidential Computing Consortium partnered with Everest Group, an industry analyst firm, in order to study the growth and need for confidential computing. The study shows that the total Addressable Market (TAM) is likely to grow at least 26 times over in the next five years in the best-case scenario due to growing enterprise awareness of confidential computing. With data privacy regulations becoming more stringent, securing confidential and sensitive data is an urgent priority for organizations globally.

The Everest Group forecasts that the Confidential Computing market will reach a $54B market opportunity by 2026. The Confidential Computing Summit comes at a pivotal moment to help educate, expose, and accelerate organizational initiatives around Confidential Computing including unveiling solutions and the latest innovation across the ecosystem of solutions from hardware providers, cloud providers, software platform providers and more. The Confidential Computing Summit will bring together a community of innovators, organizational executives, regulators, business leaders, managers, security experts, data scientists, data analysts, AI/ machine learning practitioners, data privacy experts, and researchers. Customers, prospects, and companies evaluating Confidential Computing will see the latest innovations from leading companies and hear from users that work with confidential data across industries, including but not limited, to financial services, insurance, healthcare, manufacturing, adtech, web3 and more.[12]

[11] ibid.
[12] Cision PR Newswire, 'The Confidential Computing Consortium and Opaque Systems Announce Inaugural Confidential Computing Summit to Advance Demand for Confidential Computing' (2023) <https://www.prnewswire.com/news-releases/the-confidential-computing-consortium-and-opaque-systems-announce-inaugural-confidential-computing-summit-to-advance-demand-for-confidential-computing-301753267.html> accessed 20 July 2023.

The Confidential Computing Summit serves as a pivotal event conference where we bring together the community of innovators, researchers, business leaders, and users to learn, educate, and share the latest innovations and success stories across every aspect of confidential computing including". Topics at the summit are secure data sharing, data processing, multi-party analytics and AI, privacy enhancing technologies, and confidential computing cloud platforms".[13]

Amongst pioneers and proponents of this emerging industry, Nick Vidal, Outreach Chair for the Confidential Computing Consortium, highlights the importance of confidential computing is the future of cloud computing, where the confidentiality and integrity of data is assured even when the Cloud infrastructure is compromised.[14]

"The Confidential Computing Summit represents a unique opportunity to meet experts and explore cutting-edge technology that marks a paradigm shift in how we secure the Cloud".[15]

b) Customer Analysis

Several factors come into play when looking at the confidential computing market across the globe.

The current leading markets in confidential computing are North America and APAC (ex-China). It seems that strong security demand in these two geographies to tackle cyber threats can further push adoption of confidential computing within the enterprise ecosystem. The trend is also accelerated by government support in developing and adopting cybersecurity measures that preserve confidentiality of data.[16]

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[13] ibid.

[14] Cision PR Newswire, 'The Confidential Computing Consortium and Opaque Systems Announce Inaugural Confidential Computing Summit to Advance Demand for Confidential Computing' (2023) <https://www.prnewswire.com/news-releases/the-confidential-computing-consortium-and-opaque-systems-announce-inaugural-confidential-computing-summit-to-advance-demand-for-confidential-computing-301753267.html> accessed 20 July 2023.

[15] ibid.

[16] Grand View Research, 'GVR Report Cloud Computing Market Size, Share & Trends Report Cloud Computing Market Size, Share & Trends Analysis Report By Service (SaaS, IaaS), By End-use (BFSI, Manufacturing), By

In the European market rising privacy concerns and regulations such as GDPR accelerate adoption. Furthermore, European Markets such as Germany, the UK, France, Switzerland, and the Nordics are expected to drive adoption in the region.[17]

It appears that enterprises working with sensitive data are accelerating the adoption of confidential computing in order to protect their intellectual property and costumer data. Government rules and regulations, and end user privacy concerns will accelerate the adoption of confidential computing in other industries over the coming years. End-user privacy concerns are increasing due to 2021 being a record year for data breaches.
Lastly, according to Identity Theft Resource Center (ITRC) research, the total number of data breaches through 30 September 2021 has already exceeded the total number of events in 2020 by 17%, with 1,291 breaches in 2021 compared to 1,108 breaches in 2020.[18]

c) Analysis regarding competition

Centralized Cloud and Confidential Computing Cloud computing services are offered by numerous tech giants at different prices. Direct competitors include but are not limited to Google, Amazon, Microsoft. Such services are vulnerable to single points of failure resulting in network downtime.
Another vulnerability of centralized cloud computing services is the so called “inside threat” where client’s data is vulnerable to employee actions. Traditional cloud computing has another vulnerability, and that is malicious actors that can access or tamper with data via cyber-attacks.

Deployment (Private, Public), By Enterprise Size (Large, SMEs), And Segment Forecasts, 2023 – 2030’ <https://www.grandviewresearch.com/industry-analysis/cloud-computing-industry> accessed 20 July 2023.

[17] ibid.

[18] Maria Henriquez, ‘The Top Data Breaches of 2021’ (Security Magazine RSS, Security Magazine, 2021) <https://www.securitymagazine.com/articles/96667-the-top-data-breaches-of- 2021> accessed 20 December 2022.

In an effort to further increase data protection for their clients, most of the tech giants are developing confidential computing services.

The central point of failure remains an issue and could cause network downtime due to a physical error in the server farm. The less known variable is the price that clients will have to pay for confidential computing services, however we know that the price will have to cover the company's expenses which include but are not limited to electricity, employees, and hardware.

d) Competitor Analysis

Decentralized Confidential Computing Peer to peer computing marketplaces started developing in order to offer infrastructure for the upcoming WEB3.

The vision behind those projects allows users to rent out their idle computing power in order to receive rewards in their native token. Peer to peer marketplaces most often have a variable price for computing services.

The cost of computing resources is directly affected by multiple factors such as the number of requests, the number of idle computing resources connected to the ecosystem and the amount of computing power needed for each task.

In certain instances, users must input the task and the amount of computing resources required, and then they can bid for the computing power needed using the ecosystem's native token.

Direct competitors include but are not limited to Golem, Iexec, Phala Netowrk, ICP, and Akash Network. Competitors that started as computing marketplaces are starting to develop confidential computing as an option of their ecosystem. Decentralized confidential computing projects that are based on peer-to-peer transfer of resources are directly affected by the number of service providers, developers, and end users in their community.

The quality of the infrastructure provided by competitors, direct marketing and awareness efforts are directly linked with the number of users. For example, competitors that launched their services in 2018 have a strong community on their direct communication channels, around 30,000 – 40,000 active users.

On the other hand, looking at other competitors, that launched in 2016 and have a much smaller community on their direct communication channels, around 4500 members. A key point to take into consideration is that direct competitors are extremely developer friendly on the websites, and are openly looking for contributors, some of them are even hiring in their career section, to further develop their ecosystem.

Another key point that has to be taken into consideration is the number of institutional clients that are using the competitor ecosystem. The number of institutional clients is directly affected by the quality of the infrastructure, the total pool of computing power in the ecosystem, and the confidential aspect of the service.

e) Centralized Cloud Computing Competitors

Centralized cloud computing competitors are mainly large corporations. Studies show that in Q3 of 2021, 61% of the cloud infrastructure service market was split between a few giant providers, leaving a 39% market share to small and medium competitors.[19]

The main advantages of centralized cloud computing competitors are their marketing budgets, consumer base and popularity. In order to assess the disadvantages, one has to first keep in mind that very few of the corporations that dominate the cloud computing market are able to offer confidential computing services.

[19] Kimberly Mlitz, 'Global Cloud Infrastructure Market Share 2021' (Statista, 2021) <https://www.statista.com/statistics/967365/worldwide-cloud- infrastructure-services-market-share-vendor/> accessed 2 May 2023.

The main disadvantage is represented by the lack of confidentiality of traditional cloud computing services, a threat which is amplified by the "insider threat" discussed earlier in this analysis. Another serious disadvantage, shared by every centralized cloud or centralized confidential computing competitor is the vulnerability to the single point of failure.

This event refers to power or internet outages in the area of the server farm, or hardware failures that can compromise client data. The costs of running a server farm such as construction/rental costs, electricity, cooling, internet, and workforce are reflected in the service costs offered by centralized cloud computing competitors.

f) Decentralized Cloud Computing Competitors

The most important aspect of a decentralized cloud computing competitor is represented by the size of the community supporting the project. Most often the community plays a key role in developing the infrastructure of the project, by becoming service providers or dApps developers. A small community results in limited computing resources available on the ecosystem.

Unlike centralized competitors, decentralized ones are not vulnerable to a single point of failure since the ecosystem is spread out across multiple countries or continents.

Decentralized cloud computing competitors share the same lack of confidentiality as centralized competitors. The increasing concern for confidentiality of data inspired decentralized cloud computing competitors to develop confidential computing services.

Nevertheless, Ethernity Cloud provides a superior solution for this enigma of decentralized cloud computing in a confidential outset.

g) Analyze findings, prove thesis statement

Ethernity CLOUD's ecosystem is a much-needed alternative to the current cloud computing and confidential computing market.

Due to an increasing number of cyberattacks, the emphasis on confidentiality of data is increasing among end users and companies. Government laws and regulations regarding data protection and confidentiality of user data are bound to increase the adoption rate of confidentiality-oriented solutions.

The confidential computing ecosystem of Ethernity CLOUD will offer increased levels of confidentiality, high availability, and blockchain based integrity, while lowering service costs and vulnerability.

3. OVERVIEW OF THE ETHERNITY CLOUD REVENUE MODEL BASED

The Issuer intends to introduce the state-of-the-art ETHERNITY CLOUD Ecosystem gradually over the next two to five years.

The ETHERNITY CLOUD has developed a business strategy to offer products and services to both businesses and consumers.

To diversify the portfolio of products and services provided by ETHERNITY CLOUD, we have separated three independent ETHERNITY CLOUD products as it follows:

a) Ethernity CLOUD Mobile Wallet

The Wallet is available for installation from the Google Play Store and the App Store. Ethernity CLOUD Wallet is a secure and protected cryptocurrency wallet. You can monitor your ECLD Staking rewards directly from your Ethernity CLOUD Wallet on Android or iOS, which is what sets it apart from other cryptocurrency wallets.

b) Ethernity CLOUD Staking dApp

The Ethernity Cloud Staking Decentralised Application can be accessed via the following link: https://staking.ethernity.cloud/staking.

This application is used to reward node operators and extended stake providers. The reward incentivizes our current community to run Ethernity Cloud Nodes and maintain them connected to the internet and electricity in order to earn rewards in the form of ECLD tokens.

Terms:
1. Staking: The process of locking your tokens in order to receive a reward (10%) during the first year.

2. Base Stake: The minimum base stake required to run an Ethernity Cloud Node is 1976 ECLD tokens. If the node is not maintained correctly, the base stake will be penalised.

3. Extended stake: Extended stake can be a maximum of 73 024 ECLD tokens per node.

4. Total cumulated stake: 75 000 ECLD tokens per node.

5. Node Operator: The person running and maintaining Ethernity Cloud Nodes.
6. Extended stake provider: This is a staker who does not necessarily run his own Ethernity Cloud Node, but he delegates his ECLD tokens to node operators. They both share the 10% APR.

- How does Ethernity Cloud Staking work?

1. The node operator needs to have the minimum required base stake of 1976 ECLD tokens to be able to enter extended staking agreements. If the node is disconnected from the internet or from electricity, only the base stake will be penalised. The operator is the only actor earning staking bonuses from the base stake.

2. Extended stakes will not be penalised if the node is off or malfunctioning.

3. Each extended staking contract has a reward percentage split. That shows how the rewards from the extended stake will be divided among the node operator and the extended stake provider.

c) Ethernity Cloud Hardware Affiliate Programme

Ethernity Cloud Hardware Affiliate Programme ('HAP') can be accessed via the following link: https://hap.ethernity.cloud/.

The Ethernity Cloud Hardware Affiliate Programme was designed for three main reasons:

1. Accelerating the expansion and decentralisation of the Ethernity Cloud Ecosystem
2. Helping existing ETNY holders purchase Pre-configured Nodes
3. Helping non-ETNY holders get on board of the Ethernity Cloud Ecosystem by allowing them to purchase pre-configured nodes with the minimum base stake.

On the Ethernity Cloud HAP website, you can apply to become a hardware affiliate. The Issuer assesses applicants via official documents that they provide and meetings with the Ethernity Cloud HAP Operations Lead.

Ethernity Cloud assesses their capability to cover at least one geographical region, their technical capabilities to set up Ethernity Cloud nodes as well as their background, legal entity, and sale capacity.

After a hardware affiliate has been approved, he will receive a list of 500 unique codes. When he sells a node with a base stake, he will need to provide the user with one unique code and to provide us with the proof of sale and the code that he assigned.

The user will have to register with the Issuer on the HAP website. The user will need to keep his node connected for a total of 30 days. After those 30 days pass, Ethernity Cloud will

allocate his base stake to his wallet. From this point on, he can begin staking via the Staking dApp.

4. SUMMARY OF ETHERNITY CLOUD'S BUSINESS LINES

Ethernity CLOUD generates revenue through network fees that are charged for utilizing the computing power inside the ecosystem. The network fee is calculated based on the operator total reward. The key actors involved in generating network fees revenue are:

Data Owners: Data owners play a vital role in the Ethernity CLOUD ecosystem. They submit requests for tasks along with the maximum amount of tokens they are willing to pay for the task results. When a match is found with a network operator, the task is executed, and the network fee is automatically processed. The network fee is deducted from the data owner's payment and contributes to the revenue.

Network Operators: Network operators run computing nodes on TEE (Trusted Execution Environment) compatible hardware. They advertise their computing resources and specify the minimum cost in tokens for using those resources. The minimum cost in tokens, known as the operator reward, is a portion of the network fee awarded to the operator. As the operator rating increases, the network fee decreases, providing incentives for operators to offer competitive pricing and generate revenue through their services.

Ethernity CLOUD: As the ecosystem developer, Ethernity CLOUD also receives a portion of the network fee. This revenue contributes to the sustainability and growth of the ecosystem.

From Fees						
		2023	2024	2025	2026	2027
	Total Network Fee	30%	25%	20%	15%	10%
	Company Revenue	80%	70%	60%	50%	40%
	Staking	20%	30%	40%	50%	30%
	Burning	0%	0%	0%	0%	30%
	Estimated Company Revenue	3,896,569 ECLD	5,218,868 ECLD	7,922,616 ECLD	5,261,010 ECLD	2,955,872 ECLD
From Token Sale						
		2023	2024	2025	2026	2027
	Total Supply	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000
	Tokens Sold	0.50%	1.00%	1.00%	1.00%	1.00%
	Estimated Company Revenue	5,000,000 ECLD	10,000,000 ECLD	10,000,000 ECLD	10,000,000 ECLD	10,000,000 ECLD
Projected Total Revenue		8,896,569 ECLD	15,218,868 ECLD	17,922,616 ECLD	15,261,010 ECLD	12,955,872 ECLD

Figure: Overview of ETHERNITY CLOUD's business lines

IV. ETHERNITY CLOUD'S PROTOCOL BASED ON EVM

1. INTRODUCTION

The Issuer is developing the tools to use the Ethernity CLOUD protocol based on the EVM (Ethereum Virtual Machine), which uses a consensus mechanism called Proof of eXecution. The official launch is planned at a further stage as per the roadmap.

The ECLD token is a ERC-20 Token. The migration of the ETNY token from bloxberg to Polygon will be performed by a Smart Contract Bridge that will burn the existing ETNY tokens in circulation and convert all of them into ECLD tokens as VFAs under the Maltese regulatory framework.

At a later stage of the ETHERNITY CLOUD Project, ECLD Tokens might be migrated to the proprietary Blockchain solution.

This section of the Whitepaper describes:

- the chosen Ethereum standard, namely ERC-20;
- The EVM based protocol developed by Ethernity CLOUD;
- the migration process from the bloxberg's blockchain to Polygon's blockchain based on Ethereum's ERC-20 standard;
- Smart Contracts as a solution which shall be the underlying technology pursuant to the migration process.

1.1. BITCOIN DRAWBACKS

Due to the widespread success of Bitcoin, which was the first decentralized cryptocurrency implemented in practice thanks to solving the problem of fault-tolerant distributed computing, Blockchain technology was introduced to the public. This solution without a doubt was a giant leap, but as time showed, improvements can be made to the concept and the way it is translated

into practice. Bitcoin relies on proof-of-work to secure consensus, which requires massive amounts of electricity that comes with a significant daily cost. The protocol has a low throughput of several transactions per second and a slow double-spending prevention mechanism, which requires up to an hour to reasonably confirm a payment.

Furthermore, there is no real solution to the problem, and continuous expansion of the Blockchain can lead to ever-increasing numbers of ordinary people being excluded from participation in the network. As the codebase is very monolithic, the distinction between the three layers of networking, consensus, and application does not exist, which completely disables the usage of light clients in the context of custom applications, due to the inability to exclude invalid transactions. Therefore, developing decentralized applications based on Bitcoin is hindered by security, scalability, and capability flaws. Several partial solutions offer some mitigation, as the Lighting Network, but they are limited and unable to address the whole problem.

1.2. ETHEREUM DRAWBACKS

The goal of Ethereum is to enable building decentralized applications in a rapid manner (tasks that are difficult or outright impossible to accomplish on the Bitcoin Blockchain can be completed with a few lines of code on the Ethereum Blockchain). The application layer is turned into the Ethereum Virtual Machine with the ability to execute programs called smart contracts, allowing usage of light clients, and making data easy to access. Due to fast block time, payments can be reasonably confirmed in a few minutes.

In spite of these characteristics, due to the same consensus type, Ethereum inherits almost all the flaws of Bitcoin: low scalability, imperfect decentralization, low throughput of 15 transactions per second on average, high electricity consumption, and huge computing power utilized solely to secure consensus. Poor Blockchain performance also affects decentralized applications that compete for limited resources.

The Ethereum programming language is less flexible and not as advanced in capabilities as modern programming languages. Work is in progress to improve scalability and throughput, and even change consensus type, but significant changes require a long time.

2. POLYGON[20]

2.1. OVERVIEW

Smart contract platforms and cryptocurrencies have captured mass attention but still have not been able to achieve mass adoption due to scalability and user experience issues. Even on Ethereum, which is the most widely used smart contracts platform, there have not been many examples of DApps which have seen mass adoption. There have been a few cases where one or the other particular application temporarily succeeded in achieving a significant user base, but it led to crippling of the entire network during the high network load times. Essentially this means that even the most advanced and widely used platforms are not ready for mass adoption yet.

On the other hand, there are a few smart contract platforms which boast of higher transaction throughput, but they compromise on decentralization in order to improve transaction speeds. Also, many of the upcoming solutions propose developing their own blockchains, neglecting the billions of dollars of market cap that DApps and other projects have already created on platforms like Ethereum and others. More importantly, they neglect the massive developer community and developer ecosystem that currently exists on platforms like Ethereum.

POLYGON Network strives to solve the scalability and usability issues, while not compromising on decentralization and leveraging the existing developer community and ecosystem. It is an off/side chain scaling solution for existing platforms to provide scalability and superior user experience to DApps/user functionalities.

[20] POLYGON is built on the basis of the information that may be found via the following links:

Source: <https://digiconomist.net/bitcoin-energy-consumption/>.

Source: <https://github.com/maticnetwork/whitepaper>.

2.2. FEATURES

- **Slow Transactions:** The POLYGON Network solves this problem by using a high throughput blockchain with consensus provided by a selected set of Block Producers, chosen for every checkpoint by a set of Stakers. It then uses a Proof Of Stake layer to validate the blocks and publish periodic proofs (merkle roots) of the blocks produced by the Block Producers to the Ethereum mainchain. This helps in achieving high level of decentralization while maintaining an extremely fast (< 2 seconds) block confirmation times.

- **Low Transaction Throughput:** The POLYGON Network solves this problem by using a Block Producer layer to produce the blocks. Block Producers enable the system to produce blocks at a very fast rate. The system ensures decentralization using PoS checkpoints which are pushed to the Mainchain (Ethereum serves as the mainchain for a start).

- **Scalability:** Theoretically the POLYGON Network has the capacity for millions of transactions per second with the usage of multiple side chains. Also, the mechanism to do so has already been demonstrated with the first Matic proof-of-concept with the first Matic side-chain and new chains can be added in due course of time.

- **Size of Blockchain:** For the POLYGON Network, the primary layer which provides decentralization may choose to store only the blocks of POLYGON Chain from the previous checkpoint to the next checkpoint. All previous transaction/block proofs have been submitted to the mainchain. This enables extremely low fidelity PoS nodes which can be run in very low-cost machines with low storage. In future, The POLYGON Network intends to enable mobile device based PoS miners too.

2.3. STRUCTURE

POLYGON architecture can be divided into three conceptual layers:

- **Consensus:** The POLYGON Network uses a dual strategy of Proof of Stake at the checkpointing layer and Block Producers at the block producer layer to achieve faster

blocktimes while ensuring a high degree of decentralization by achieving finality on the main chains using the checkpoints and fraud proof mechanisms.

- **Checkpointing Layer:** Basically, anyone can stake their MATIC Tokens on root contract to become a Staker in the PoS checkpointing layer (contract deployed on Ethereum chain). This provides a highly decentralized base layer for POLYGON Chain.
- **Block Producers:** At the blockchain layer of the POLYGON Network, there are Block Producers, selected by PoS Stakers on the base layer, who will be creating the POLYGON Blocks. To achieve faster block generation times, these Block Producers will be low in number. This layer is expected to achieve ~1 second block generation times at extremely low to negligible transaction fees.

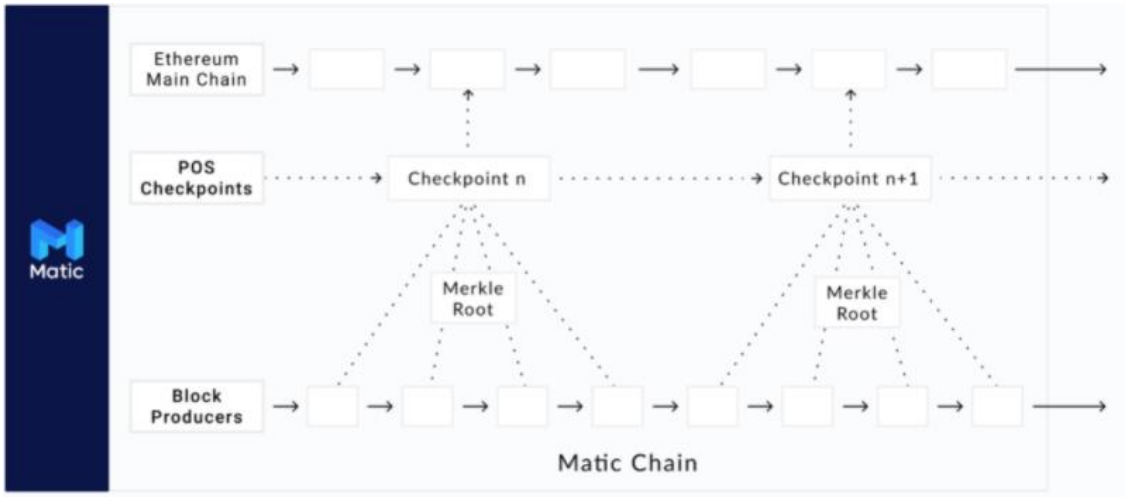


Figure 11: POLYGON architecture[21]

2.4. PEPPERMINT (POLYGON's TENDERMINT)[22]

2.4.1. OVERVIEW

Peppermint is a modified Tendermint.[23] It is changed to make it compatible with Ethereum addresses and verifiable on Ethereum chain. Tenderminting is a novel consensus protocol that requires no proof-of-work mining and has a high level of protection against double-spend

[21] Source: https://github.com/maticnetwork/whitepaper.
[22] Source: https://wiki.polygon.technology/docs/pos/peppermint/.
[23] Source: https://tendermint.com/static/docs/tendermint.pdf.

attacks. Tedermint makes aweak assumption about the participant's abilities to keep time, and we assume partial synchrony of the network. The algorithm is based on a modified version of the DLS protocol and is resilient up to 1/3 of Byzantine participants.

2.4.2. BFT CONSENSUS

The algorithm assumes that the network is partially synchronous; there is assumed to be some unknown upper bound Δ on the time of messages to be delivered. Intuitively, there may be arbitrary but finite latency in the network. The algorithm also assumes that all non-byzantine nodes have access to an internal clock that can stay sufficiently accurate for a short duration of time until consensus on the next block is achieved.

The clocks do not need to agree on a global time and may drift at some bounded rate relative to global time. The algorithm is adapted to work with blockchains on a gossip network.

As in the algorithm proposed by Dwork et al, it can tolerate of up to 1/3 byzantine voting power.

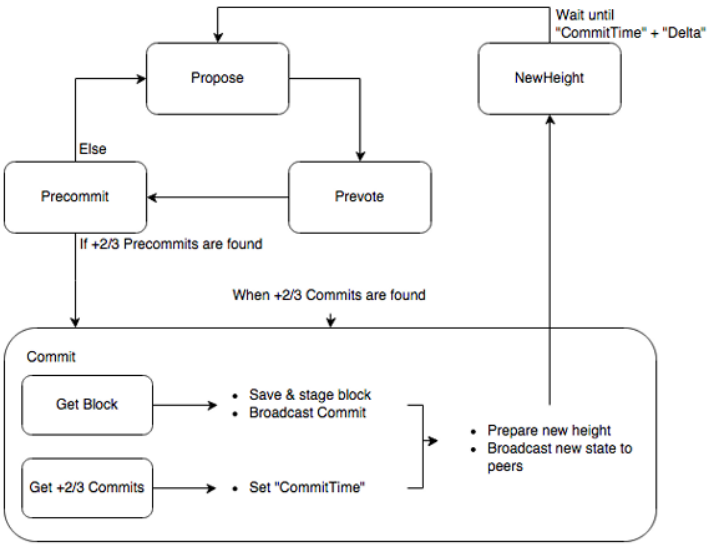


Figure: Tendermint's Overview of the state machine[24]

[24] Jae Kwon, 'Tendermint: Consensus without Mining' (Polygon, 2014) <https://tendermint.com/static/docs/tendermint.pdf> accessed 28 July 2023.

3. ETHEREUM[25]

3.1. ERC-20 OVERVIEW

The ERC-20 token standard is probably the most common and best known Ethereum technology standard. It is the result of the twentieth improvement suggestion in the Ethereum Improvement Proposals (EIP) repository, a collection point for improvement proposals. Due to the ERC-20's ability to quickly and easily create its own tokens based on the Ethereum Blockchain, it became the most popular token standard in recent years, significantly contributing to the popularity of both Ethereum and ICO.

The Smart Contract of this token standard usually defines the following details, which should inform the user about the token:

- the token name under which the token contract is stored;
- the token abbreviation, which usually consists of 3-4 letters;
- the number of decimal places in which the token is stored;
- a list of the token holders and their token balances.

The total amount of available tokens is derived from the sum of the account balances. The possibility to increase or decrease this amount is given by the token standard: either by the Smart Contract distributing new tokens (mint) or by the Smart Contract taking the tokens from the balance sheets and destroying them (burn).

The ERC-20 tokens can be moved between different Ethereum addresses. Nevertheless, there is a fundamental difference to regular ether transactions on the Ethereum Blockchain because

[25] ETHEREUM is built on the basis of the information that may be inspected via the following links:
Source: Ethereum EIPs documentation, <https://eips.ethereum.org/EIPS/eip-777>.
Source: OpenZeppelin token documentation, <https://docs.openzeppelin.com/contracts/2.x/tokens.html>.
Source: OpenZeppelin ERC-777 contracts GitHub repository,
<https://github.com/OpenZeppelin/openzeppelincontracts/tree/master/contracts/token/ERC777>.

an ***ether transfer*** consists of a ***transaction field*** for the transaction amount and a ***data field*** for additional data.

However, in the ***token transaction***, information about the number of tokens to be sent is in the second field. For this reason, transfers between the addresses of two parties are possible, but using the token as a trigger for a function of another Smart Contract does not work. In this way, if a user sends a transaction to a Smart Contract, and this is not recognized by the Smart Contract, the ethers from the transaction are irrevocably lost.

3.5. ERC-20 DETAILS

An ERC-20 token standard brings all the advantages of the most popular Smart Contracts.
The ETHERNITY CLOUD team is fully competent in creating software in this specific area (using Solidity programming language for Smart Contract creation).
The Smart Contract serving the ETHERNITY CLOUD Project is built using the OpenZeppelin library, which minimizes various risks by using battle-tested libraries of Smart Contracts for Ethereum. Advanced security mechanisms are built into the Blockchain contracts themselves.

Using well-tested and stress-tested codebase and getting feedback from the auditors will enhance security even further to the Participants interested in Ethernity Cloud, such as serviced parties and node operators, as well as for developers who will built application on Ethernity Cloud through its SDK (currently in development as per the roadmap).

3.6. ETHERNITY CLOUD'S ERC-20 TOKEN CONSTRUCTION

Ethernity Cloud's native token, namely ECLD, is an ERC20 token, with a separate contract for it's protocol with a specific interface.

```solidity
// SPDX-License-Identifier: AGPL-3.0-or-later
pragma solidity ^0.8.21;

interface IEthernityCloud {
    function addDPRequest(
        uint8 cpuCores,
        uint16 ramMemoryGB,
        uint8 storageGB,
        uint8 bandwidthMbps,
        uint32 durationSec,
        uint256 minPrice,
        string memory metadata1,
        string memory metadata2,
        string memory metadata3,
        string memory metadata4
    ) external returns (uint256 requestId);

    function getDPRequestsCount()
        external
        view
        returns (uint256 dpRequestsCount);

    function getDPRequest(
        uint256 requestId
    )
        external
        view
        returns (
            address dproc,
            uint8 cpuCores,
            uint16 ramMemoryGB,
            uint8 storageGB,
            uint8 bandwidthMbps,
            uint32 durationSec,
            uint256 minPrice,
            uint256 status
        );
```

Figure: Ethernity CLOUD Protocol Interface Contract snippet

3.7. ETHEREUM ERC-20 TOKEN CONTRACT

```solidity
// SPDX-License-Identifier: AGPL-3.0-or-later
pragma solidity ^0.8.20;

import "./access/Ownable.sol";
import "./token/ERC20/ERC20.sol";
import "./token/ERC20/extensions/ERC20Permit.sol";
import "./token/ERC20/extensions/ERC20Capped.sol";
import "./token/ERC20/extensions/ERC20FlashMint.sol";
import "./IEthernityCloudERC20.sol";

contract EthernityCloudERC20 is Ownable, ERC20, ERC20Permit, ERC20Capped, ERC20FlashMint, IEthernityCloudERC20 {

    event Mint(address receiver, uint256 value, string mintId);

    uint256 private immutable _initialCap = 1000000000 * (10**decimals()); // 1 billion ECLD (Wei)
    uint256 private immutable _initialBalance = 0; // 1 million ECLD (Wei)

    constructor() ERC20("Ethernity CLOUD", "ECLD") ERC20Permit("Ethernity CLOUD") ERC20Capped(_initialCap){
        _mint(msg.sender, _initialBalance);
    }

    /**
     * @dev See {ERC20Capped-_mint}.
     */
    function _mint(address account, uint256 amount) internal virtual override(ERC20Capped, ERC20) {
        ERC20Capped._mint(account, amount);
    }

    function mint(address receiver, uint256 value, string memory mintId) public onlyOwner {
        _mint(receiver, value);
        emit Mint(receiver, value, mintId);
    }

}
```

Figure: ERC20 Interface

Default ERC-20 token contract interface is based on OpenZeppelin.

4. ETHERNITY CLOUD's PROTOCOL INTERFACE FUNCTIONS

Common Functions:

getDORequest: This function retrieves the details of a specific data owner request, including the number of CPU cores, amount of RAM and storage, the bandwidth amount, the duration, the maximum accepted price, and the status of the request (such as whether it's available, approved, in processing, or cancelled).

getDORequestMetadata: This function fetches the metadata of a specific data owner request. The metadata can include any additional information about the request that the data owner wishes to provide.

getDORequestsCount: This function returns the total number of data owner requests that have been made so far under the smart contract.

getOrder: This function fetches the information about a specific order, including the data owner and processor addresses, the data owner and processor request IDs, and the status of the order.

getOrdersCount: This function returns the total number of orders so far under the smart contract.

getResultFromOrder: This functions is used to retrieve the result from a particular order. It takes the order number as input and returns the result of the order.

getDPRequestsCount: This function returns the total number of data processor requests that have been made.

getDPRequest: This function retrieves the details of a specific data processor request, including the number of CPU cores, amount of RAM and storage, the bandwidth amount, the duration, the minimum accepted price, and the status of the request.

getDPRequestMetadata: This function fetches the metadata of a specific data processor request. The metadata can include any additional information about the request that the data processor wishes to provide.

approveOrder: This function is used by both data owners and data processors to approve an order. An order can only be processed once it's been approved by the other party. The function takes the order id as an input and returns a boolean indicating whether the operation was successful.

placeOrder: This function is used by both data owners and data processors to place a new order. The inputs needed are the data owner and data processor request IDs, and it returns the order number.

Data Owner specific functions:

getMyDORequests: This function is used to retrieve the list of Data Owner requests IDs initiated by the data owner.

getMyDOOrders: This function is used to retrieve the list of order IDs the data owner has Data Owner requests involved with.

addDORequest: This function is used to add a new Data Owner Request. This request includes various parameters that the data processing needs, such as the number of CPU cores, the amount of RAM and storage in GB, the amount of bandwidth, and the duration the resource are requested. It also specifies the number of instances to be run, the maximum acceptable price for processing, and additional metadata related to the request. The output of this function is the data owner request id, which uniquely identifies this request.

cancelDORequest: If a data owner decides to cancel a request, this function is called. The only input required is the request id of the request to be cancelled.

Data Processor specific functions:

addDPRequest: This function is used to add a new Data Processor Request. This request includes various parameters that the data processor sets, such as the number of CPU cores, the amount of RAM and storage in GB, the bandwidth amount, and the duration the resource can be offered for. It also specifies the minimum acceptable price for processing and additional metadata. The output of this function is the data processor request id, which uniquely identifies this request.

getMyDPRequests: This function is used to retrieve the list of Data Owner requests IDs initiated by the data processor.

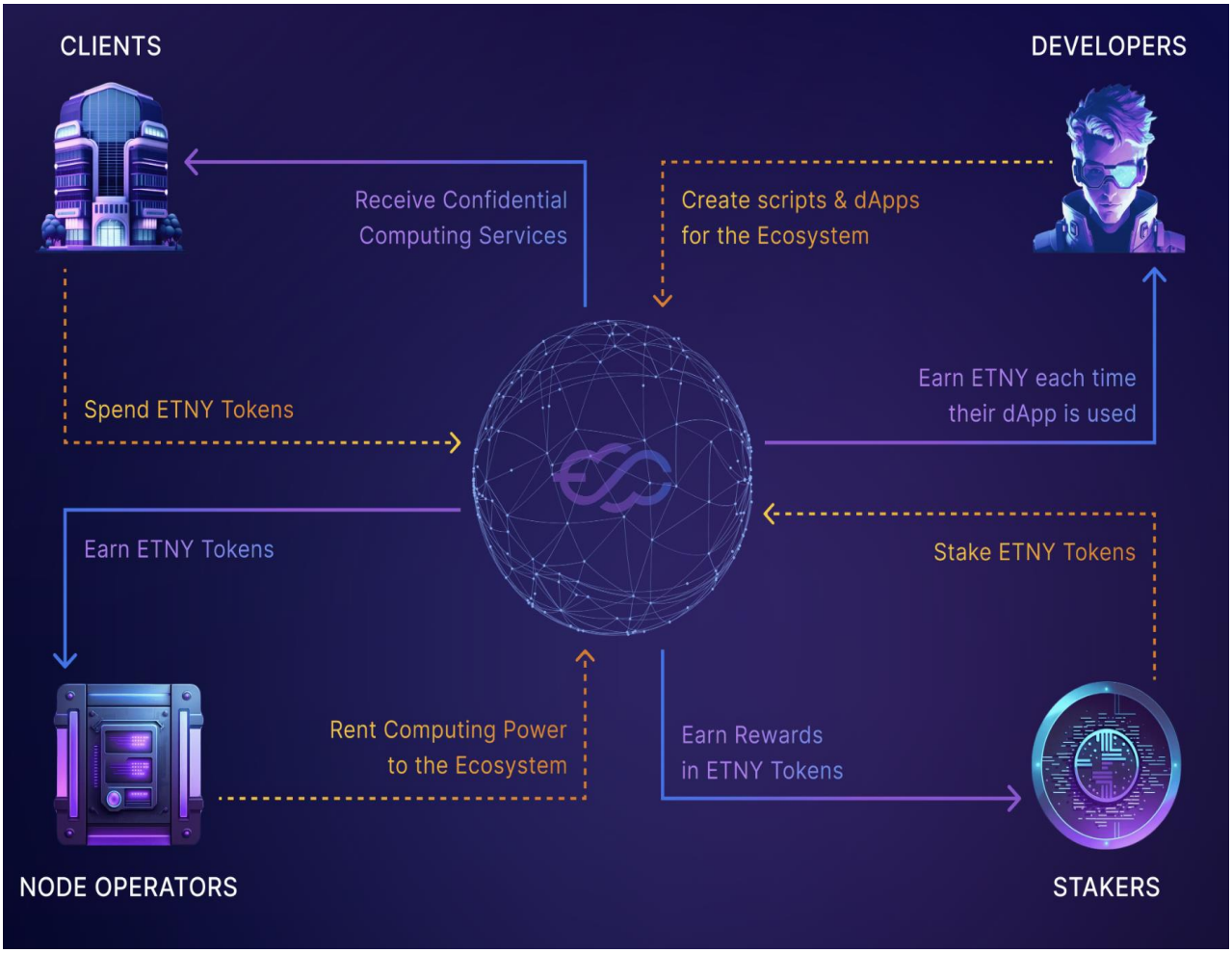
getMyDPOrders: This function is used to retrieve the list of order IDs the data processor has Data Processor requests involved with.

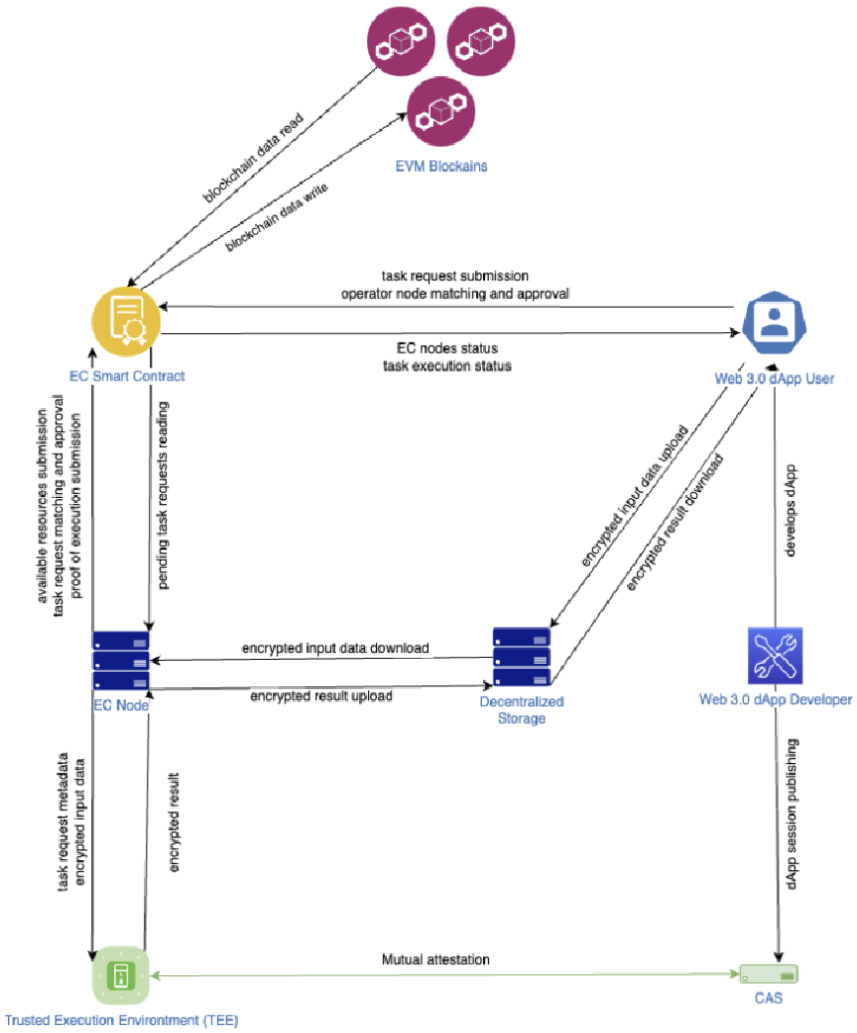
cancelDPRequest: If a data processor decides to cancel a request, this function is used. The only input required is the request id of the request to be cancelled.

addResultToOrder: Once processing is completed, this function is used to add the result proof to the order. It requires the order number and the result proof (as a string) as inputs, and it returns a boolean indicating the success of the operation.

These functions provide a comprehensive toolset for data processors and data owners within the Ethernity cloud ecosystem, facilitating the efficient offering and utilization of computational resources.

5. ETHERNITY CLOUD's ECOSYTEM DIAGRAMS



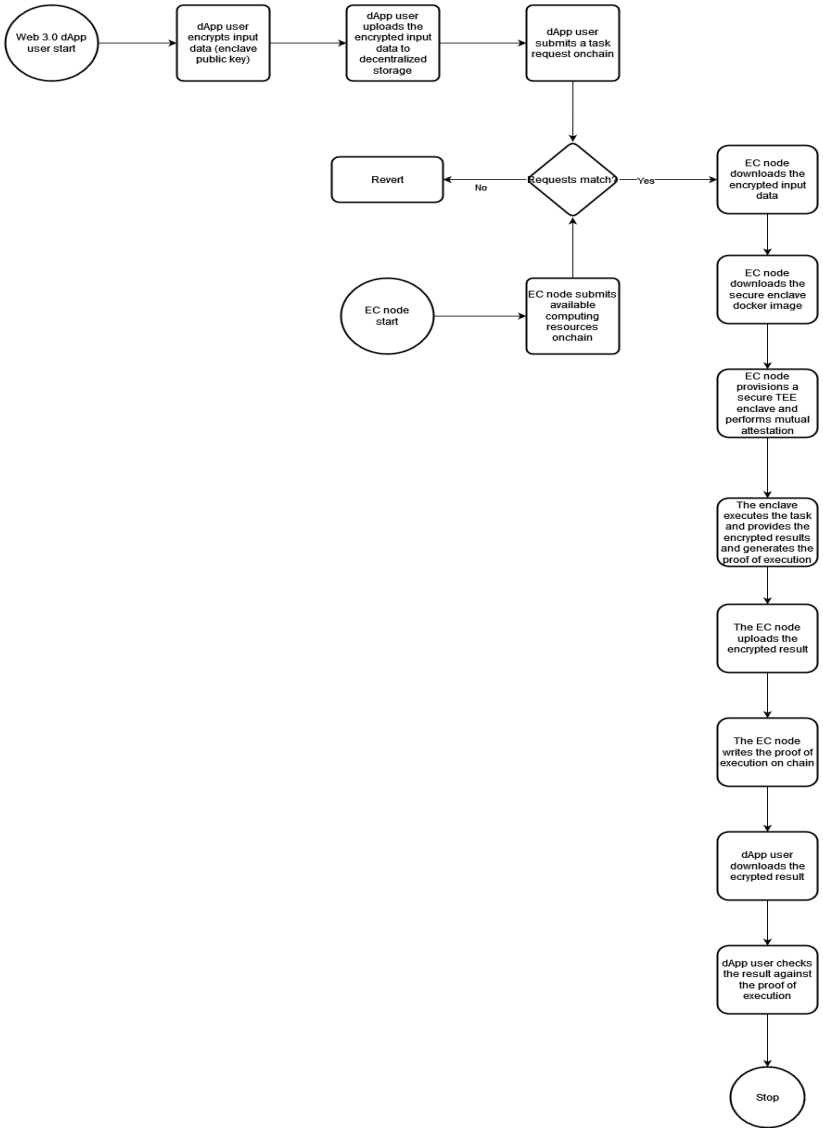


These functions provide a comprehensive toolset for data processors and data owners within the Ethernity cloud ecosystem, facilitating the efficient offering and utilization of computational resources.

The ecosystem built for Ethernity Cloud is open and one user can play one or multiple roles as it flows from the diagram. The taken role depends on the user at stake and its resources. For instance, a web 3.0 dApp user may submit a task request to the Ethernity Cloud Smart Contract, based on the decentralized application programmed by a web 3.0 dApp Developer, in order to write or read data from the underlying blockchain infrastructure.

However, there are other classes of users (e.g., EC Node Operator running the EC Node), which leads to the rationale that the process can begin from any point and component in the above diagram of the ecosystem.

DATA PROCESSING WORKFLOW



6. WALLET TECHNOLOGY USED

The ETHERNITY CLOUD ERC-20 standard token lies on top of the main Polygon Blockchain, which allows for using any kind of wallet compatible with the Polygon network and ERC-20. These solutions are supplied by various third parties, which are easy to use and multiple ledger-supported extensions are available on the most used internet browsers worldwide, as well as mobile and desktop applications (e.g., Metamask).

ETHERNITY CLOUD WALLET ('Wallet') application is the proprietary solution built on top of AlphaWallet, an open-source and customizable digital assets wallet infrastructure. The Wallet is already available and provided by the Issuer on mobile (on iOS and Android), and may be further integrated as desktop solution (Windows, macOS) via Metamask or other relevant digital frameworks.

ETHERNITY CLOUD WALLET application will automatically update the software to the latest version and will automatically import any packages that are required.

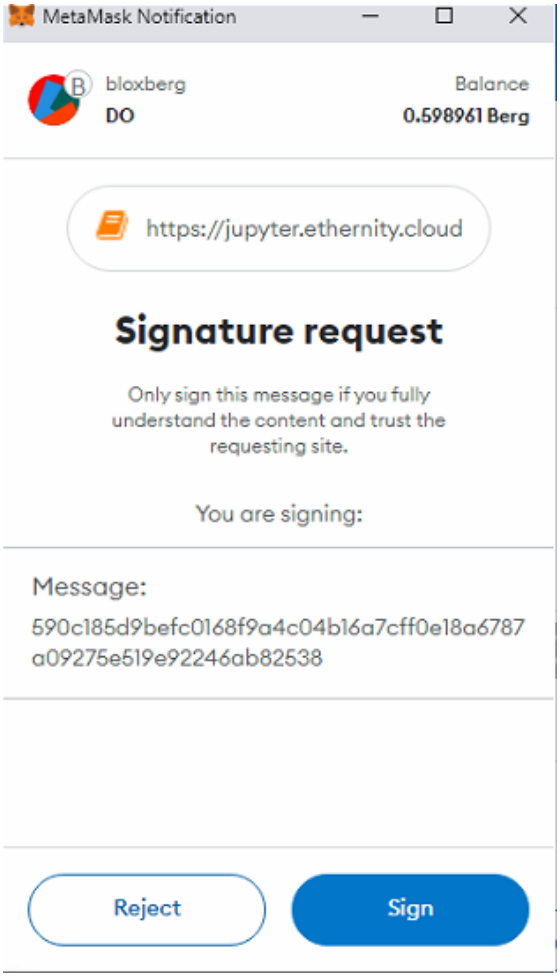
Every wallet will allow users to track transactions and the status of funds held while protecting the private key of the wallet using cryptographic mechanisms.

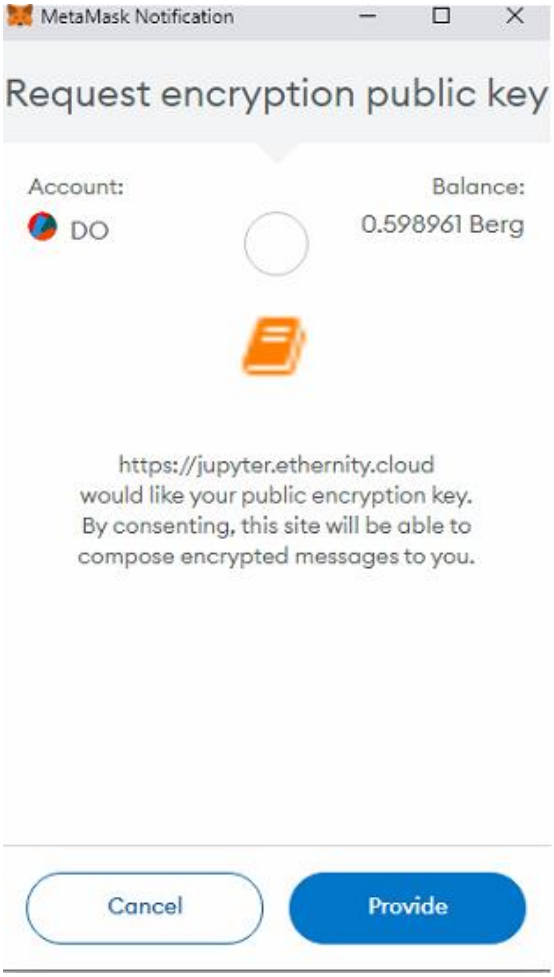
ETHERNITY CLOUD wallets will become more secure and lightweight when living on POLYGON than bloxberg, due to a more straightforward synchronization process and decentralization of the underlying blockchain infrastructure.

The OpenBeta version of the Mainnet of ETHERNITY CLOUD was launched on bloxberg. The Mainnet on POLYGON was launched in Q4 2023 (18 October 2023).

7. SECURITY SAFEGUARDS AGAINST CYBER THREATS

Ethernity CLOUD's protocol processes user's data, therefore is important to understand that on each request the user has to encrypt and sign the data. This process is part of the implementation, specific of the dApp that uses the protocol and is usually seen as a pop-up from the wallet provider.





At the moment of the whitepaper publictaion for the encryption and signature the following key pair type is used: **secp256r1**

While currently most of the EVM implementations use **secp256r1** as the basic keypair type for encryption and signature, it is possible that the protocol will support additional keypair types and encryption/signature algorithms in the future. Amendments and modifications will be adopted and integrated accordingly (if necessary).

It is mandatory to understand for the data to be protected during processing that the proper public key must be used, which allows only the specific MRENCLAVE to decrypt the data.

Communication with RPC (Remote Procedure Call) and external services is performed in a safe way by using TLS 1.2 communication whenever the service supports encryption.

8. BLOXBERG TO POLYGON MIGRATION

8.1. OVERVIEW

The bloxberg to POLYGON migration process employed by ETHERNITY CLOUD enables unidirectional value transfers that safely lock on bloxberg, then burn ETNY tokens from the former, and mint the corresponding representative tokens on POLYGON in the shape of ECLD tokens. The operation is conducted via a bridge developed by the core team led by the CTO of ETHERNITY CLOUD, which is a smart contract as described below in this section of the Whitepaper of ECLD token.

The codebase has been professionally audited by the Systems Auditor appointed by the Issuer as mentioned at the end of the Whitepaper.

Thus, the token conversion and full migration of the protocol meet the necessary requirements to be used in a production environment and is capable of managing value assets.

8.2. STRUCTURE

The architecture consists of several components and stages (e.g., tokenholder addresses that undergo KYC, smart contracts of the bridge to burn ETNY and mint ECLD tokens, event capturing and registration mechanism, off-chain worker, issuance of new address on POLYGON). Regarding the fees to operate the migration, the Issuer is prepared to cover the fees in MATIC tokens to be incurred on POLYGON.

To perform the migration from bloxberg to POLYGON, one needs to be in possession of ETNY Tokens on the ETHERNITY CLOUD Wallet assigned to the address of the Tokenholder and a destination address on POLYGON.

These values are then passed to the first part of the migration architecture from the bloxberg migration through the Smart Contract Bridge via standard transfer within ETHERNITY CLOUD’s ERC-20 Smart Contract space. The sent ETNY Tokens are permanently burned (locked) on the bloxberg blockchain and will be minted (unlocked) on the POLYGON Blockchain.

From this point, the responsibility of the user ends as further stages of the process are automatic and distributed. The SC Bridge emits a special event that is included in block-like transactions on the Ethereum chain.

The second part of the migration architecture comes into play – an interface between Ethereum and POLYGON, which listens for SC Bridge special events and signs them using previously provided POLYGON validator key.

Then, in the first POLYGON module – *bridge* – the event is parsed from an Ethereum-like structure into *the off-chain worker*, which is the validator proof of event occurrence.

Single evidence is not enough, as the required number of witnesses is needed to achieve the threshold, which makes the whole mechanism robust and distributed. When the existence of the event is acknowledged, the second POLYGON module mints tokens onto the target POLYGON addresses in the form of ECLD tokens. All ETNY tokens will be permanently locked and burnt from bloxberg, which means that they cease to exist. Their equivalents are uniquely minted on POLYGON, the only blockchain supporting ECLD tokens. Therefore, the migration is successfully concluded as explained.

The logical flow of stages described above can be illustrated by the simplified architecture diagram below that was constructed by the Board of Administrators of the Issuers together with the legal and regulatory advisors as well as approved by the VFA Agent at stake.

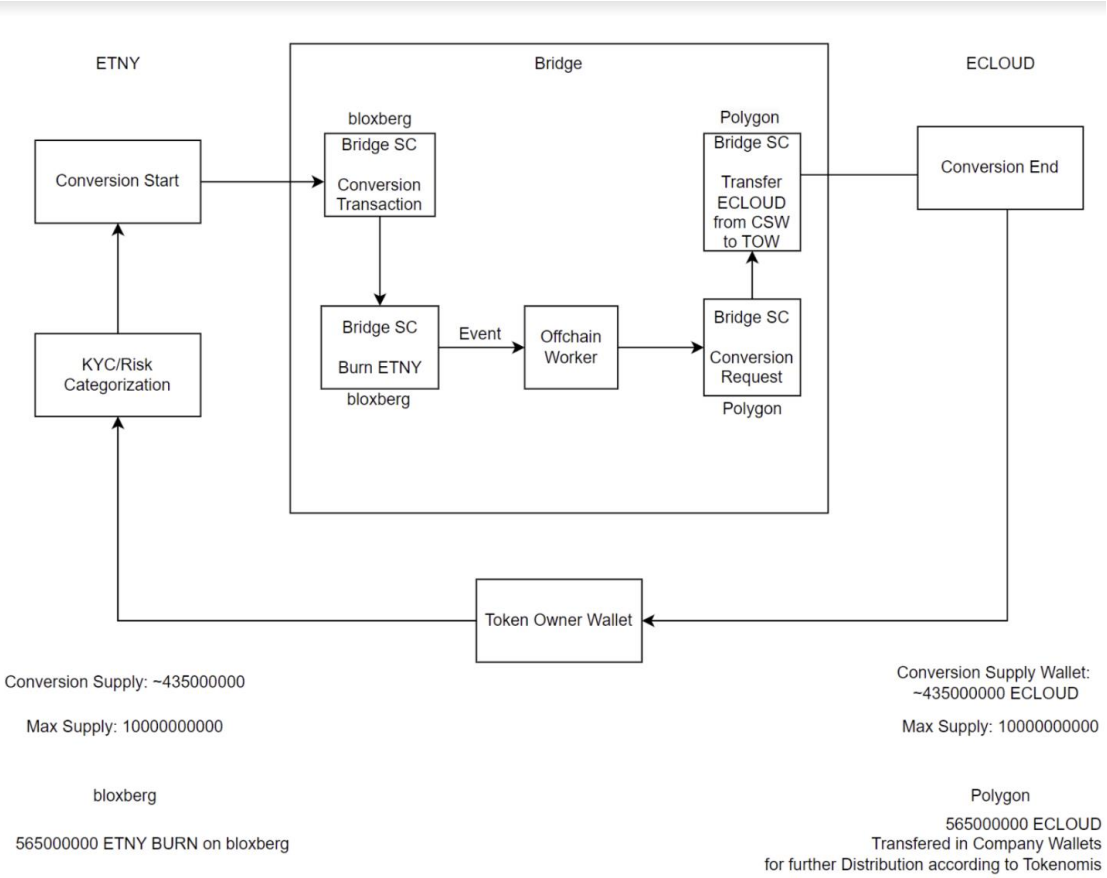


Figure: ETNY-ECLD Token conversion and migration scheme

Next to the previous technical explanation in abstract, the process may be clarified and observed in conjunction with the *ETNY-ECLD Token conversion and migration scheme* as practically stated below.

In order to participate in the aforementioned transaction, it is imperative that the Token Owner Wallet (henceforth referred to as 'Tokenholder' or 'TOW') is cognizant of the fact that said operation shall be executed via a bridge, which constitutes a smart contract (hereinafter referred to as 'SC') comprising several components and intermediary stages.

Prior to the initiation of the token conversion, it is required that the Tokenholder gain entry to the Ethernity Cloud Wallet that houses the address with ETNY tokens for the purpose of undertaking the KYC process.

This process shall result in the classification of the individual's risk level in accordance with the methodology outlined in the Annex on the Risk Matrix. Upon the successful completion

of the KYC process by the Tokenholder, the token conversion may commence in accordance with the applicable procedures.

At this juncture, the bridge enters the process. The primary logical steps and components are as follows:

a) The Bridge SC constructed on bloxberg's blockchain shall initiate the conversion transaction;

b) The Bridge SC constructed on bloxberg's blockchain shall dispose of the allocated supply of ETNY tokens;

c) This operation shall generate an event that records the transaction details in the form of arguments to be preserved in the transaction's log for future use;

d) The off-chain worker shall store the event created;

e) The off-chain worker shall transmit the data to the Bridge SC constructed on Polygon to initiate the conversion request;

f) The Bridge SC constructed on Polygon shall transfer ECLD tokens in accordance with the data validation from the Conversion Supply Wallet (hereinafter referred to as "CSW") to the TOW;

g) The conversion shall conclude, and the newly issued ECLD tokens on POLYGON's blockchain shall be kept in the TOW, which can be viewed on the digital Ethernity Cloud Wallet.

For the purpose of disambiguation, it should be noted that events are members of smart contracts that are capable of being inherited. Upon initiating communication, the opposing party proceeds to record the contentious exchanges within the transactional ledger, a distinct data construct within the blockchain.

The aforementioned logs are inextricably linked to the address of the contract and have been integrated into the blockchain. They shall persist therein for as long as a block remains accessible, which is presently an indefinite duration, although any future upgrades shall not significantly impact the underlying value proposition.

It is to be noted that the log as well as its event data cannot be accessed from within contracts, including the contract that was responsible for their creation.

It is imperative to note that the storage mechanisms known as off-chain and on-chain are separate and distinct from one another. It is impermissible to transmit data that has been gathered or handled by an off-chain worker to on-chain storage in a direct manner.

In order to effectuate any modifications to the on-chain storage system through an off-chain worker, specifically with respect to the storage of any data that has been collected or processed, it is imperative that said worker be granted the ability to transmit transactions that effectuate such modifications. The off-chain worker constitutes a distinctive runtime operation that undergoes execution subsequent to the importation of a block.

In the course of execution, it is feasible to transmit extrinsics in an asynchronous manner, which may either be disseminated to other nodes or added as unsigned transactions to the subsequent block generated by the node. The final point to be made is that the Conversion Supply Wallet ('CSW') has been established in advance by the issuer.

The aforementioned wallet contains an estimated quantity of 435,000,000 ECLD tokens, which is commensurate with the quantity of ETNY tokens that are currently in circulation as well as those that are subject to vesting, staking, and allocated rewards. Currently, it is the case that ECLD tokens held on the CSW lack any value to external parties. It is hereby stated that the entirety of the maximum supply of 1,000,000,000 ETNY tokens shall be subject to complete burning by Bloxberg. However, it is important to note that only 435,000,000 new ECLD tokens will be issued via POLYGON.

Clarificatory Disclaimer:

Beware of the fact that the total supplies of both tokens will be 1,000,000,000 ETNY and ECLD tokens at the same time until the conversion is fully completed and no other ETNY token will exist. Hence, there will be only 1,000,000,000 ECLD. Up to that point in time, the amounts of tokens will be complementary to each other, and only cumulated will reach 1,000,000,000.

Alternatively, any other ETNY token left on bloxberg, which was not converted and transferred to POLYGON at that time within the allocated period of conversion of 5 years after the launch of the staking programme (17 October 2022), will be subject to perusal on the bloxberg network for the initial objective of accessing confidential computing power through ETNY tokens, and not ECLD. ECLD will be used on POLYGON for the envisaged purposes described in the Whitepaper.

Lastly, beware that 1 (one) year of staking is the equivalent of 360 days.

Example: 500,000,000 ETNY and 500,000,000 ECLD at the same time existing in parallel on both bloxberg and POLYGON blockchains; By reiterating the same principle: 100,000,000 ETNY and 900,000,000 ECLD, and so on.

The aforementioned procedure guarantees the secure, effective, and unequivocal transfer of tokens from Bloxberg to the Polygon blockchain while minimising expenses for all parties involved.

8.3. SMART CONTRACT

The ETHERNITY CLOUD's Ethereum Smart Contract is based on the ERC-20 token standard that may let Tokenholders and recipients react to token movement, by using previously set implementers for associated interfaces.

ECLD Token owners can use this property, but more importantly, it allows for migration to run almost standalone. The migration trigger is very familiar to users, as it is almost as simple as a standard token transfer from one account to another on the Ethereum ETHERNITY CLOUD Smart Contract. The recipient field needs to be filled with a previously obtained Smart Contract migration address, and the data field should contain the destination POLYGON address.

The passed ECLD Tokens will be permanently locked to the relevant address. The aforementioned notification starts the whole flow of migration. There will be a publicly distributed register of the history of transfers containing the sender address, the POLYGON recipient address, the amount of ECLD Tokens, and the unique identifier of event occurrence.

Every new position also emits a special event, which holds data about the transfer in a way easily accessible for external services.

8.4. OFF-CHAIN WORKER

It is imperative to note that there exists a fundamental difference between off-chain storage and on-chain storage.

It is impermissible to transmit data that has been gathered or handled by an off-chain worker to on-chain storage in a direct manner. In order to effectuate any modifications to the state of the chain resulting from the collection or processing of data by an off-chain worker, it is necessary to authorise said worker to transmit transactions that effectuate modifications to the on-chain storage system.

The off-chain worker constitutes a distinctive runtime operation that is carried out subsequent to the block's import. During the course of execution, it is possible for extrinsics to be transmitted asynchronously, which may result in their propagation to other nodes or their addition as unsigned transactions to the subsequent block produced by the node.

V. ECLD TOKEN ECONOMY

1. ECLD TOKENHOLDERS RIGHTS

ECLD Tokens constitute Virtual Financial Assets in terms of the applicable legal framework established in Malta.

The ECLD Token does not entitle the purchaser to any equity, governance, voting, or other forms of control over the management of The Issuer whatsoever or similar right or entitlement in The Issuer or any of its affiliated companies and does not represent or constitute any ownership right or stake, share or security or equivalent rights or any rights to participate in or receive profits or income, arising from the acquisition, management or disposal of the pooled property or sums paid out on such profits or income or any other form of participation in or relating to ETHERNITY SWAP LIMITED.

Subject to the terms and restrictions laid down in this Whitepaper, after migrating ETHERNITY CLOUD's protocol from bloxberg to POLYGON, Tokenholders will be able to use their ECLD Tokens in exchange for services on the ETHERNITY CLOUD Ecosystem. The Issuer intends to seek listing admission to trading on one or more DLT Exchanges. After listing on one or more DLT Exchanges, the ECLD Tokens shall be exchangeable on such exchange platforms.

2. INTRODUCTION TO THE TOKEN ECONOMY

As explained in detail in this Whitepaper, ETHERNITY CLOUD is creating the ECLD Token thanks to the underlying Blockchain technology. ETHERNITY CLOUD designed a token economy as described in this Whitepaper to ensure that the ECLD Token will be an effective means of settlement in exchange for the services and resources to be redeemed from ETHERNITY CLOUD.

The value of ECLD Tokens will be a result of the value of the network and its reputation. Technical know-how is not required for end-users to benefit from the solutions offered. ECLD Tokens are play a quintessential role in the functioning of the ETHERNITY CLOUD Ecosystem because Participants may get access to services and resources (e.g., cloud computing power) only using ECLD Tokens.

The ECLD Token is a DLT asset (i.e., VFA in Malta), which shall be used as a means of settlement when ETHERNITY CLOUD's clients make use of ETHERNITY CLOUD's solutions.

The ECLD Token will be used to execute tasks unsing the protocol and will be circulating among ETHERNITY CLOUD's solutions described in Section III - INTRODUCTION TO THE BUSINESS MODEL.

Lastly, to ensure network safety and adequate functioning, nodes will be rewarded with ECLD Tokens that can be exchanged on secondary markets or staked on any of our proprietary solutions.

Disclaimer: Given that the ECLD Token will be initially based on the ERC-20 standard and minted on POLYGON (as planned), its Token Economy will differ from the initial set up of the ecosystem surrounding the ETNY Token. Please refer to the contents of the regarding the migration and token conversion from ETNY to ECLD for details on this matter.

Overview of token applications in the ETHERNITY CLOUD Ecosystem

1. **Settlement** method for goods and services offered via the ETHERNITY CLOUD Ecosystem (post-migration)
2. **Discount**: Such ECLD Tokens can be used for further acquisition of goods and services thus reducing prices of products and services offered on the ETHERNITY CLOUD's protocol (post-migration).

Please find a detailed description of the applications of the ECLD Token below.

2.1. SETTLEMENT METHOD FOR GOODS AND SERVICES OFFERED VIA THE ETHERNITY CLOUD ECOSYSTEM

Fiat payment

Mainly, BTC, ETH, and MATIC will be the preferred choice. Depending on the regulatory developments and legal certainty to come, the Issuer may provide fiat payment while respecting the national law of the jurisdiction where its operations reside (i.e., Malta).

However, there will be adapters allowing payments in supported Fiat currencies, be it EUR or USD. A small part of the payment will be converted into ECLD Tokens (bought on the free market) and distributed as an additional reward for the network nodes. This approach allows a fair incentive system for the consensus participants, rewarding them even if the payment is not finalized with ECLD Tokens.

The validators guarantee not only the circulation of the ECLD Token but also the overall security of the ETHERNITY CLOUD Protocol. This implies that there is a rewards system in place even if the payment is made in Fiat currencies, which offers the possibility to correlate the business performance of the ETHERNITY CLOUD Protocol with the ECLD Token ecosystem.

Reminder: The first option to acquire ECLD tokens on other exchanges is through MATIC, BTC or ETH. Should an alternative exist on any given DLT exchange, the responsibility lies with the third-party exchange to properly assess and accept the risks involved to protect users.

ECLD Token settlement

Depending on the service offered on the ecosystem, there might be direct ECLD Token settlement support; no conversion is required, and only a transaction fee is paid. If payment is made in ECLD Tokens instead of a Fiat currency, the fee will be reduced, with the aim of encouraging other users to buy, keep and use ECLD Tokens as a means of settlement.

Tokens are to be transferred to the Issuer's wallet. The Issuer will be able to sell the ECLD Tokens received as settlement for services on DLT Exchanges, keep them at his discretion, or use them for other ecosystem functionalities.

Network Reputation

Part of the ETHERNITY CLOUD ecosystem is the network reputation system. The reputation system runs benchmarks to determine the performance of the operators. The network uses the benchmark result, together with other metrics to determine a reputation score for each of the network operators.

This reputation helps the data owner pick a more reputable operator during the matching process.

ETHERNITY CLOUD Wallet

After the migration, the ETHERNITY CLOUD Wallet can be enabled at the user's request. It is used to freely manage all ECLD Tokens contained therein. ECLD Tokens in the ETHERNITY CLOUD Wallet are under the full, exclusive control of the user. The Issuer has no control over such ECLD Tokens.

3. ETHERNITY CLOUD'S GENESIS (POLYGON)

The maximum supply of ECLD Tokens is 1 Billion. A total of 380,000,000 ETNY will be burned and the equivalent 380,000,000 ECLD will be minted initially and allocated to different wallets for their purpose. The remaining 620,000,000 ECLD will be minted as the equivalent ETNY tokens will be burned while passed through the bridge, or the conversion period of 5 years is reached.

4. TOKEN ALLOCATION

ETNY (Former token)

Total number of tokens: 1,000,000,000 (one billion) ETNY

Circulation Supply (total minted): 465,000,000 (four hundred sixty-five million) ETNY

Company reserves: 34%

Private placements (private sale): 21%

Public sale of ETNY: 15%

Staking rewards: 15%

Founders: 10%

Marketing and advisors: 5%

ECLD (Current token as VFA)

Total number of tokens: 1,000,000,000 (one billion) ECLD

Circulating Supply (at the time of conversion): 113,500,000 ECLD (If all ~ 70,142,854 unlocked ETNY tokens are converted)

Company reserves: 16%*****

Liquidity: 10%****

MarketMaking: 4%***

Team rewards: 4%**

ETNY Founders: 10% *

ETNY HOLDERS: 37% *

ETNY Staking: 15%*

Marketing and advisors: 4%

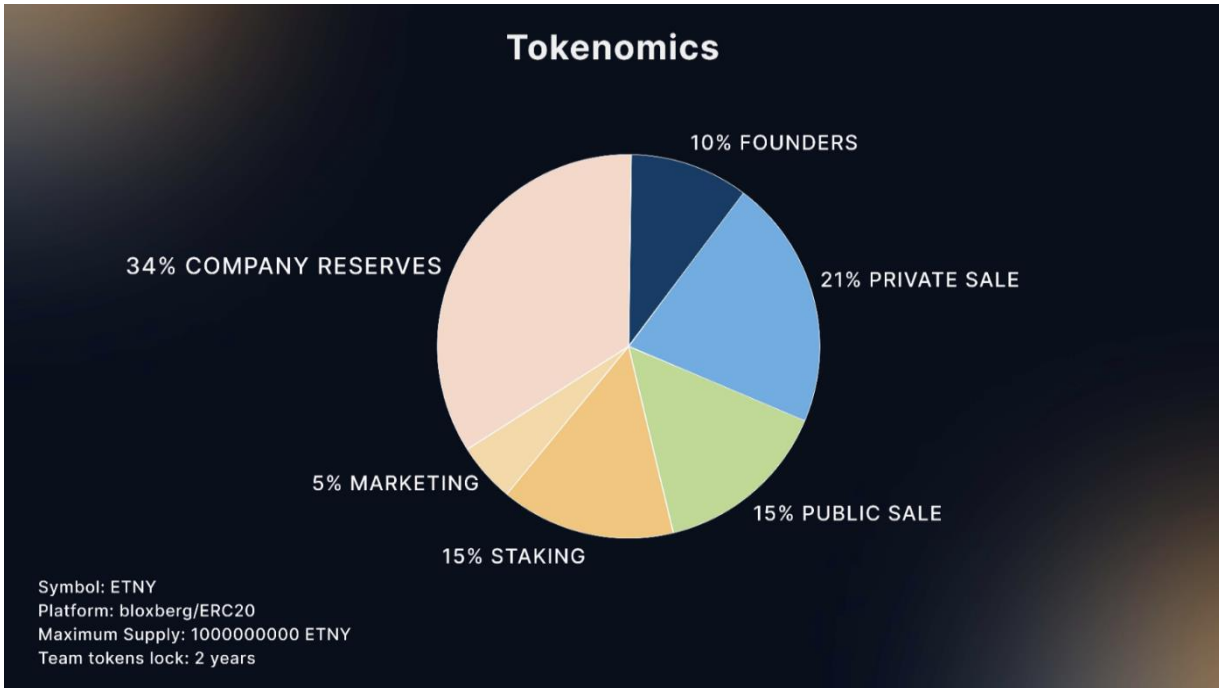


Figure: Tokenomics of the ETNY Token

**These tokens will be minted as corresponding ETNY tokens are passed through the bridge. The ETNY tokens allocated to Founders are subject to a hard lock-up period of 2 years after the launch of the Mainnet on bloxberg (15 September 2023).*

***Team rewards will progressively unlock across 4 years.*

****Liquidity provided to MarketMaker to protect the financial stability of the ecosystem.*

***** In case of hardship, additional liquidity may be infused on case-by-case analysis.*

******Company reserves are locked for 3 years.*

There is NO public sale scheduled for ECLD tokens and no such event will take place in the future regarding this token. This whitepaper solely describes the token conversion and seeks approval from the home regulator in the form of registration. The Issuer plans to seek admission for the listing of ECLD tokens on the secondary market.

34% - Company Reserves

The Issuer's enterprise requires capital to be infused in the development of the project and of strategic partnerships that might involve compensation to third parties for their cooperation or services. This part of the token allocation is an incentive offered to entities who contributed and believed in the ETHERNITY CLOUD Project from its early stages, investing time, resources, and funds to actively support it and reach this stage in the roadmap. The same rationale applies to the upcoming partners and collaborators. The ECLD Tokens allocated to partners and collaborators are subject to certain Terms and Conditions and the Issuer's intention is for such tokens to be locked up for a certain amount of time upon an ad-hoc agreement drafted between the parties by their designated/appointed representatives by the Board or by the community of each side.

21% - Private Sale

ETHERNITY CLOUD has already allocated this amount of ETNY Tokens to Private Sale investors who decided to support the Project in the long run. Their ECLD Tokens are subject to certain Terms and Conditions and the Issuer's intention is for such tokens to be locked for a certain amount of time.

15% - Public sale within the community of the ETNY token

15% of all tokens were distributed to Participants.

The ETHERNITY CLOUD team allocated 15% of the initial Total Supply of one billion tokens for a public sale within the community to increase both the funding for the project and the level of decentralization. The Issuer wants to build a community of Tokenholders supporting the project and holding ECLD Tokens long-term.

15% - Staking rewards

In the beginning, not all the tokens will be in circulation. Part of the tokens will be distributed to the network as rewards that can be obtained while governing the network via the Proof of eXecution mechanism, when users decide to stake tokens to strengthen the ecosystem, and for the effort of the node operators to validate transactions taking place on the ETHERNITY CLOUD Protocol. Thus, these tokens will not be in circulation from the first stage. The maximum period of staking is 24 months at the moment and may suffer modifications upon due notice on the website of the Issuer and in line with market conditions. ETHERNITY CLOUD can incentivize users to participate in the network operations.

10% - Founders

Individual team members (mainly founders) will be compensated or partly compensated for services rendered by means of ECLD Tokens. The ETHERNITY CLOUD core team will hold this percentage. The intention of such token allotment is to lockup those tokens in the early stages of the project, which will prevent a decrease in the token value. The ECLD Tokens allocated to team members are subject to certain Terms and Conditions and the Issuer's intention is for such tokens to be locked up for a certain amount of time. This measure is intended to safeguard the interests of the clients and of the community.

5% - Marketing and Advisors

Individual advisors shall be compensated or partly compensated for services rendered using ECLD Tokens. 5% of ECLD Tokens are intended to be distributed to specialists in various areas, who cooperate with the ETHERNITY CLOUD team. The ECLD Tokens allocated to advisors are subject to certain Terms and Conditions and the Issuer's intention is for such tokens to be locked up for a certain amount of time.

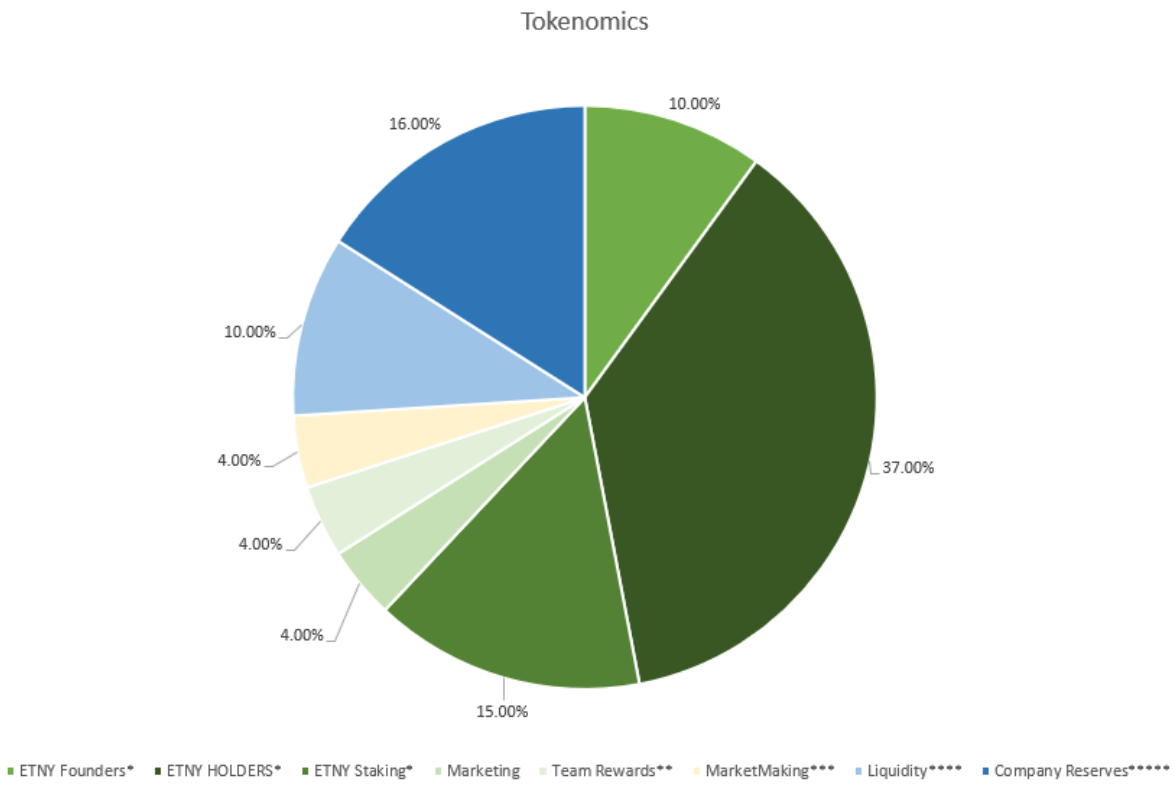


Figure: Tokenomics of the ECLD Token

16% - Company Reserves

The Issuer's enterprise requires capital to be infused in the development of the project and of strategic partnerships that might involve compensation to third parties for their cooperation or services. This part of the token allocation is an incentive offered to entities who contributed and believed in the ETHERNITY CLOUD Project from its early stages, investing time, resources, and funds to actively support it and reach this stage in the roadmap. The same rationale applies to the upcoming partners and collaborators. The ECLD Tokens allocated to partners and collaborators are subject to certain Terms and Conditions and the Issuer's intention is for such tokens to be locked up for a certain amount of time upon an ad-hoc agreement drafted between the parties by their designated/appointed representatives by the Board or by the community of each side. These tokens are locked for 3 years.

10% - Liquidity

The company reserves the right to allocate liquidity as necessary to various liquidity pools as well as various other activities requiring liquidity including but not limited to: DEXs, bridges, staking, Marketmaking, specific DeFi use cases, and more.

4% - MarketMaking

The company allocates this amount initially for marketmaking activities to ensure an appropriate spread and depth of transactions on exchanges, stimulating trading activity, for fair market conditions.

4% - Team Rewards

These rewards will be used to incentivize the team members in the 4 years after the issuance of the token. Therefore the vesting period of these tokens is 4 years.

4% - Marketing

These tokens supply will be used to incentivize the community to contribute to the ecosystem. These tokens allocated for marketing activities will include, but are not limited to: grants programs, ambassador programs, business development programs.

62% - SWAPPABLE TOKENS*

- 10% Founders
- 37% ETNY HOLDERS
- 15% ETNY STAKING

**Beware that the swappable tokens (e.g., Founders tokens, ETNY HOLDERS, ETNY STAKING) will only be able to be converted to ECLD tokens after the expiration of the lock-up or vesting period on the bloxberg network.*

VI. THE INITIAL VFA OFFERING

DISCLAIMER: THERE WILL BE NO INITIAL VIRTUAL FINANCIAL ASSET OFFERING. ETHERNITY CLOUD PLANS ONLY THE TOKEN CONVERSION OF ETNY TOKENS INTO ECLD TOKENS. ETNY IS NOT A VFA. ECLD QUALIFIES AS A VFA.

1. PREVIOUS ROUNDS OF FUNDING

The Issuer has raised an approximate amount of 4.9 M USD in a seed round and allocated a significant amount of ETNY Tokens to such early-stage investor/s. The funds raised were utilized for marketing purposes (i.e., ETHERNITY CLOUD's protocol upgrades, developing Website and graphical design, conferences, summits, pitch decks), technology development (as per the roadmap milestones), team enhancement, legal advice, regulatory opinions, legal whitepaper preparation, and VFA application process (including cooperation with CSB Fintech Limited, Sali Blockchain & Crypto Regulations, GTG Advocates, FACT Systems Audit et. al.).

The Issuer has subsequently decided to register this Whitepaper with the Malta Financial Services Authority (MFSA) in accordance with the Maltese law to conduct the token conversion and further seeking admission from DLT exchanges to list the converted ECLD token to be utilized by the Tokenholders, Issuer, node operators and other Participants as described in this Whitepaper.

The Issuer received undertakings from private investors for an approximate amount of 4,9 M USD in a private pre-sale of ETNY Tokens, thereby allocating 35.084% of the Total Supply of ETHERNITY CLOUD's ETNY Tokens to such private investors, which is about to remain the same in notional value and percentage after the conversion into ECLD tokens.

2. KEY CHARACTERISTICS OF THE PRIVATE PRE-SALE, PUBLIC SALE WITHIN THE COMMUNITY AND CURRENT CONVERSION OF ETNY INTO ECLD TOKENS

2.1. REASONS FOR THE PRIVATE PRE-SALE AND PUBLIC SALE WITHIN THE COMMUNITY

ETHERNITY CLOUD presents the following reasons:

- Continuous developing of the ETHERNITY CLOUD Ecosystem and its underlying technology;
- The funds will be used for R&D, software and product development, human resources, acquisition of the necessary hardware and software, market research, product maintenance, and related expenses and costs related to the development of the ETHERNITY CLOUD Ecosystem and underlying technology;
- cover expenses related to marketing and sales of ETHERNITY CLOUD’s products, as well as expenses related to public, investor and strategic relationships;
- cover other operational expenses and costs the business may face from time to time.
- to ensure that the ECLD Token circulates on both bid and ask sides within the offered DLT exchange while the VFA is freely, fairly, and orderly exchangeable and accessible to a wide audience on DLT Exchanges to ensure availability of ETHERNITY CLOUD's services to users;
- to ensure full transparency and compliance with the European and Maltese regulations to protect investors' interests while the ecosystem and its stakeholders are adequately safeguarded;
- the listing on a DLT Exchange to facilitate secondary market trading of the ECLD Token in fairly and orderly market.

2.2. STRUCTURE

1. Private sale (only before as virtual token under VFA) – NO PRIVATE SALE NOW
2. Public sale within the community – NO PUBLIC SALE NOW

The Issuer is not planning to offer ECLD Tokens to the public in the form of an IVFAO. The Issuer seeks approval from the regulator (i.e., MFSA) to undergo the token conversion in order to transform the current virtual token (ETNY) into a virtual financial asset (ECLD).

By approval of the Whitepaper and official registration, the Issuer shall pursue listing of the ECLD token as VFA on various DLT exchanges.

After the listing of the ECLD Token, investors who acquired ETNY Tokens and converted them into ECLD Tokens will have the opportunity to exchange them on the secondary market on one or more DLT Exchanges.

2.3. PLANNED NUMBER OF ECLD TOKENS IN CIRCULATION AFTER TOKEN CONVERSION

It is planned to have 70% of the total of ECLD Tokens in circulation after the Token Conversion period ends in late 2026 - early 2027 (the ECLD Tokens held only by IVFAO Participants shall be freely transferable immediately upon admission to trading on one or more DLT Exchanges). However, this percentage is only an approximation of the Board of Administration, which might not be accurate, nor represent the actual situation at that point in time. Hence, it is unlikely to precisely foresee this notional value or this percentage based on *inter alia* further release into circulation from company reserves, market making and burning mechanism.

Lastly, the remaining ETNY Tokens will be converted into ECLD Tokens, which will be gradually released over time in accordance with the terms and conditions connected with the ECLD Tokens in question.

Total number of ECLD Tokens to be issued (maximum circulating supply)

Stage 1 (bloxberg) – maximum circulating supply: 465,000,000 (four hundred sixty-five million) ETNY

Stage 2 (ERC-20 after migration to POLYGON) – maximum circulating supply: 465,000,000 (four hundred sixty-five million) ECLD

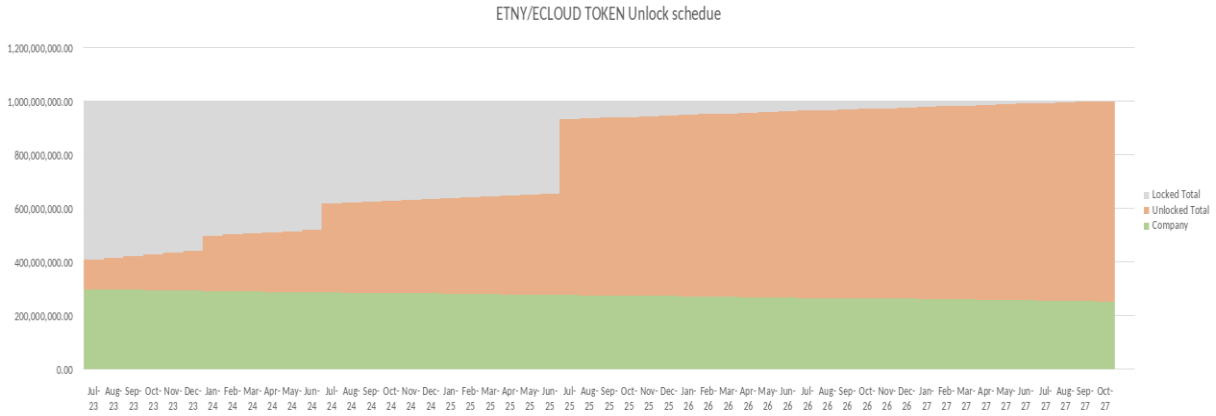


Figure – ETNY/ECLD Tokens Unlock Schedule

N.B.: Due to the fact that 52.6% of the initial total token supply of ETNY Tokens (526,000,000) has never entered into circulation, the Issuer will convert this amount into ECLD Tokens and allocate it according to tokenomics.

2.4. IVFAO SOFT AND HARD CAPS OF THE TOKEN CONVERSION

TOKEN CONVERSION: SOFT AND HARD CAPS

There is virtually NO soft, nor hard cap because this operation and the purpose of this Whitepaper is not to announce the IVFAO of the ECLD token but its mere conversion from ETNY tokens already issued on bloxberg to ECLD tokens issued on POLYGON. All the ETNY tokens are to be converted into ECLD tokens were issued prior to this moment and

there is absolutely no possibility in the future to supplement the amount of ETNY, nor ECLD tokens.

NB: For the purposes of the legal requirement to mention such caps under the VFA Act's First Schedule, the sections below will refer to this operation consisting of token conversion as IVFAO.

IVFAO Soft Cap

The Issuer has established a Soft Cap for this token conversion of 10,000,000 (ten million) ECLD Tokens, which represents 1% of the maximum supply circulating of ETNY tokens.

The Issuer shall provide an undertaking to source alternative funding in order to meet its minimum working capital requirements to continue to finance the Issuer's business growth in the event that the funds raised by means of the IVFAO and Private Sale are not sufficient to meet such minimum working capital requirements.

The Issuer undertakes to refund the issuing value of the ECLD Token paid on subscription by the Participants in the event that the IVFAO Soft Cap is not reached by the end of the Initial VFA Offering. Once the IVFAO Soft Cap is reached, and notwithstanding the fact that the subscription period of the IVFAO may not have expired yet, the Issuer shall be free to start utilizing the proceeds collected from the sale of ECLD Tokens through the IVFAO as prescribed in the section regarding the rationale behind this Whitepaper.

IVFAO Hard Cap

The Issuer has established the IVFAO Hard Cap set as a maximum amount of ECLD Tokens to be allocated for sale during and for the purposes of the IVFAO in accordance with Section V.4. - TOKEN ALLOCATION.

The summary of the allocation can also be observed in the EXECUTIVE SUMMARY.

Concerning Section V.4. – TOKEN ALLOCATION, the IVFAO Hard Cap is 465,000,000 million ECLD tokens. This is the current maximum supply minted on bloxberg to migrate on Polygon in the shape of ECLD token after burning through the Smart Contract Bridge. Thus, the conversion is 1:1 (ETNY:ECLD).

Prospective Market Participants who wish to acquire ECLD Tokens through the services of an intermediary, such as a DLT Exchange, should also take into account that a lower hard cap on ECLD Tokens may apply when acquiring through such intermediary.

As a relative remark, the Issuer appreciates that the value of the token is to be proportionate to the additional improvements made to the protocol as stated in the roadmap. Ethernity Cloud puts forward this statement for the community and it is exclusively based on the expert opinion of the development team.

Nevertheless, please be aware that this statement shall not be interpreted in the sense that the ECLD token derives its value from the improvements carried on and brought into the ecosystem by the core team of the Issuer. The token shall exclusively base its value as deemed by the community and traders on the secondary market by virtue of supply and demand and utility of the ECLD token within the ecosystem provided and maintained by Ethernity Swap Ltd.

Proposed Lifecycle

Q4 2023 – submission of application for registration of the Whitepaper and the start of Token Conversion of ECLD Tokens.

Q4 2023 – Commencement of the listing on DLT Exchanges that are duly authorized in their Home State and prove to be compliant with EU and International Standards.

Methods of payment

BTC, ETH, MATIC, and in case of acquiring ECLD Tokens through the services of an intermediary authorized for such purpose by the Issuer, any other currencies, whether virtual

or otherwise, accepted by such intermediary after the due diligence process (including KYC) was performed on the market participants. The payment methods apply to the exchange of tokens on the secondary market, or private exchanges between Tokenholders. It is not for an IVFAO in the sense of fund raising.

NOT a public sale of ECLD Tokens – NOT IVFAO

The Issuer is not planning a public sale of ECLD Tokens in the form of a traditional IVFAO. The only operation to be executed is a token conversion that is 1:1 between ETNY:ECLD tokens.

Geographical restrictions

The ETHERNITY CLOUD Website, including the mechanisms used for the token conversion and ECLD Tokens, are not explicitly offered by the Issuer for use to natural and legal persons having their permanent residence or their seat of incorporation in the following countries: Germany, USA, Puerto Rico, US Virgin Islands, Canada, China, Singapore, Afghanistan, Central African Republic, Cuba, Democratic Republic of the Congo, Eritrea, Iran, Iraq, Libya, North Korea, Russia, Somalia, South Korea, South Sudan, Sudan, Yemen, Zambia (Restricted Areas).

Should natural persons have any of these nationalities, the individual will not be directly discriminated against, nor rejected in a definitive manner.

However, the individual in this scenario is redirected to the enhanced due diligence process (EDD) and is entitled to prove (s)he resides in a permitted jurisdiction by providing a valid identification document (e.g., passport, National ID card, electricity bill, phone bill) in line

with PRADO, which is an authorized and up-to-date online register maintained by the European Council.[26]

Pursuant to the validation of the adequate residence, the individual may proceed accordingly.

Experienced Investors

ETHERNITY CLOUD shall treat a Participant as an Experienced Investor if such Participant declares that:

- they have already participated in other offerings of VFAs;
- they have invested in VFAs over 10,000 EUR or its equivalent; and
- they possess the necessary experience, knowledge, and expertise to make their own investment decisions and properly assess the risks involved.

ETHERNITY SWAP Ltd shall also treat the following as Experienced Investors:

- entities which are required to be authorized or regulated to operate in the financial markets;
- large undertakings meeting two of the following size requirements on a company basis:
    - balance sheet total: 20,000,000 EUR, ○ net turnover: 40,000,000 EUR, ○ own funds: 2,000,000 EUR;
- national and regional governments, public bodies that manage public debt, Central Banks, international and supranational institutions such as the World Bank, the IMF, the ECB, the EIB, and other similar international organizations;
- other institutional investors whose main activity is to invest in VFAs, including entities dedicated to the securitization of assets or other financing transactions.

[26] European Council, 'PRADO' <https://www.consilium.europa.eu/prado/en/search-by-document-country.html> accessed on 27 April 2023.

Furthermore, ETHERNITY CLOUD shall treat a Participant as an Experienced Investor in the event where the following criteria are cumulatively satisfied:

- the Issuer will undertake an adequate assessment of the expertise, experience and knowledge of the Participant, and this assessment gives reasonable assurance, in the light of the nature of the transactions or services envisaged, that the Participant is capable of making their own investment decisions and of understanding the risks;
- in the course of the assessment referred to in the point above, as a minimum, two of the following criteria shall be satisfied:
    - the Participant has carried out transactions, in significant size, on the relevant market at an average frequency of 10 per quarter of the previous four quarters,
    - the size of the Participant's Virtual Financial Asset portfolio, defined as including cash deposits and Virtual Financial Assets, exceeds 500,000 EUR or its currency equivalent,
    - the Participant works or has worked in a position, which requires knowledge of the transactions envisaged,
    - the Participant has worked in the financial sector for at least one year in a professional position;
- the following procedure is followed:
    - the Participant shall state in writing to the Issuer that they wish to be treated as an Experienced Investor,
    - the Issuer will give such Participant a clear written warning of the protections and investor compensation rights they may lose, and
    - the Participant will state in writing in a separate document from the contract, that they are aware of the consequences of losing such protections.

N.B.: The Issuer shall provide an undertaking to source alternative funding in order to meet its minimum working capital requirements to continue to finance the Issuer's business growth in the event that the funds raised by means of the IVFAO and Private Sale are not sufficient to meet such minimum working capital requirements.

The Issuer underlines that NO refund concerning the issuing value of the ETNY Token converted into ECLD Token paid on subscription by the Participants since there is virtually no Soft Cap to be reached in the end. This operation concerns only a token conversion and no additional subscribed capital will flow in the ECLD token, nor in the Company Reserves of the Issuer. Once the token conversion is reached, and notwithstanding the fact that the subscription period of the IVFAO may not have expired yet, the Issuer shall be free to start utilizing the proceeds from the private sale and public sale within the community, and the counter-value of ECLD Tokens as per secondary market real-time estimations.

The Soft Cap was based on the financial model, which outlines the minimum working capital required.

Given the funding already secured by ETHERNITY CLOUD, as well as the financing planned to be raised through the Private Sales, the Soft Cap was exclusively set at 10,000,000 million ECLD tokens to be converted.

The business model was stress-tested for adverse movements in revenue and cost assumptions. As an outcome of this exercise, it was determined that the Soft Cap of 10,000,000 million tokens would result in a positive cash flow position throughout all projected years, including as per the least performing scenario.

It is worth mentioning that by the end of the financial year ending June 2023, ETHERNITY CLOUD had already utilized 4.1 million USD on the business and technological development of the ETHERNITY CLOUD project as agreed with the community upon the public announcement and debates within the closed groups of the protocol.

Moreover, ETHERNITY CLOUD's Board of Administrators expects that the Mainnet will already be in place in Q4 2023 in order to be ready to be used for the mission described in the Whitepaper.

The total expenditure includes the following cost categories:

- Solutions: costs related to software development by third parties, individual costs of outsourced IT work specific to a business line from the business model of ETHERNITY CLOUD, cost of UX/UI for ETHERNITY CLOUD, product

development, cost of target market research for ETHERNITY CLOUD, proprietary software applications, product development collaborators and specialized staff;

- Marketing and Sales: marketing expenses for ETHERNITY CLOUD products, cost of sales-related business trips, promotion of ETHERNITY CLOUD, its products and services detailed in this Whitepaper, cost of general marketing and PR, sales and general marketing personnel, sales representatives commission fees (performance fees);
- Operational expenses: costs of legal and business development consulting, research and preparatory works, cost of maintenance of ETHERNITY CLOUD products, other administrative costs (e.g., accounting, bookkeeping), professional fees, product maintenance personnel and collaborators, administrative staff.

Such costs are related to the production of the product development and the associated services put at disposable by the Issuer, which transform these into capital business expenses.

2.5.UTILIZATION OF FUNDS ONCE IVFAO SOFT CAP IS EXCEEDED

If the Issuer succeeds at exceeding IVFAO Soft Cap requirements, any additional funds will be utilized to bolster ETHERNITY CLOUD's business efficiency.

However, it is to be remembered that such event may and shall not occur because there will be no IVFAO (only a token conversion and migration from bloxberg to POLYGON).

Participants, users, the community members, and other interested third parties may not derive any right from the amounts raised by ETHERNITY CLOUD thus far in the sense that the excess of capital raised will be allocated towards any specific objective.

Nevertheless, the business plan accordingly considers the business expense for the proper and adequate growth, development, and expansion of the ecosystem, which is the ultimate goal of ETHERNITY CLOUD next to providing a decentralized viable and feasible solution for confidential cloud computing.

2.6.TIMEFRAME OF THE TOKEN CONVERSION

The token conversion shall begin immediately after registration of this Whitepaper in terms of the VFA Act and it will continue for the maximum duration allowed under the VFA Act (if applicable for such an operation). To the knowledge of the Issuer, the VFA Act does not prescribe a maximum period for this specific activity of a token conversion. Hence, the Issuer reserves its right to arbitrarily determine the period of 30 months for the token conversion (as accordingly authorized through the registration of this Whitepaper by the regulator).

The Issuer reserves the right to end the token conversion after the end of the subscription period (30 months from the date of registration of this Whitepaper on the MFSA's website) at its own discretion notwithstanding that any Hard Cap may not have been reached, provided that the Issuer shall not terminate the token conversion before the subscription date is over in the event that the Soft Cap has not yet been reached.

The Issuer shall make an announcement to such effect through its website and social media channels that are in use and kept up to date.

2.7. METHODS OF PAYMENT

Accepted methods of payment include Fiat money (EUR and USD), BTC, ETH, MATIC, USDT, and in case of acquiring ECLD Tokens through the services of a DLT exchange or other entity authorized for such purpose by the Issuer, any other currencies, whether virtual or otherwise, accepted by such intermediary, provided that any payment methods accepted by the

Issuer will be in line with Maltese laws and regulations against money laundering and the financing of terrorism.

The exchange rate for methods of payment other than EUR (before the DLT Exchange debut) will be calculated based on the price of EUR in relation to other cryptocurrencies. In the case of cryptocurrencies, the website https://coinmarketcap.com/ will be used as source of reference the exchange rates. Regarding USD, the EUR/USD exchange rate of the European Central Bank at that moment will be considered.

2.8. PRIVATE SALE PURCHASES OF ETNY TOKENS (PRE-MIGRATION)

The Issuer reserves the right to sell ECLD Tokens to purchasers of the ECLD Tokens via a Private Sale:

- at a price which may be different from that attributed to ECLD Tokens offered by virtue of the token conversion in conjunction with the value displayed on any secondary market at stake;
- at a discount or at a premium when compared to ECLD Tokens offered by virtue of the token converison;
- applying any structure, the parties may agree upon, which may not be applicable to all or other Participants, users or interested third parties.

2.9. GEOGRAPHICAL RESTRICTIONS

The ETHERNITY CLOUD Website, including the mechanisms used for IVFAO and ECLD Tokens, are not offered for use to natural and legal persons, having their permanent residence or their seat of incorporation in the following countries: USA, Germany, Puerto Rico, US Virgin Islands, Canada, China, Singapore, Afghanistan, Central African Republic, Cuba, Democratic Republic of the Congo, Eritrea, Iran, Iraq, Libya, North Korea, Russia, Somalia, South Korea, South Sudan, Sudan, Yemen, Zambia.

The geographical restrictions will be implemented through one or more following actions:

- KYC procedures performed by a specialist, reputable KYC company, in line with the ETHERNITY CLOUD's AML & CFT Policy,
- geo-blocking of incoming traffic from Restricted Areas as implemented on the ETHERNITY CLOUD servers;
- legal measures embedded according to the Whitepaper, the terms and conditions of the token conversion, and any other ancillary agreements as specified herein.

Restrictions on the free transferability of ECLD Tokens: Once admitted to trading on one or more DLT Exchanges, ECLD Tokens shall be freely transferable provided that the prospective Tokenholder does not have their habitual residence or their seat of incorporation in a Restricted Area, and provided that all applicable AML and CFT rules are adhered to.

3. OTHER, GENERAL TERMS & CONDITIONS OF THE TOKEN CONVERSION

If potential Participants buy ECLD Tokens from ETHERNITY CLOUD, the following documents shall be binding on said Participants:

- The privacy policy,
- The sale of ETNY Tokens agreement,
- The Token Conversion Agreement by virtue of engaging in it via the Smart Contract
- The Whitepaper of the ECLD Token.

All of these documents will be available on the ETHERNITY CLOUD Website upon commencement and during the Token Conversion.

Application of pre-emptive rights on the part of holders of ECLD Tokens:

Not applicable to ETNY Tokens that were not minted until the start of the subscription period for the purpose of the token conversion into a VFA:
Any ETNY Tokens which are not subscribed for in the Token Conversion or in any way not taken up will belong to the Issuer and may be used, utilized, and/or distributed as ETHERNITY CLOUD deems fit at its sole discretion.

4. TARGETED INVESTOR BASE

A Participant who does not qualify to be considered as an Experienced Investor shall not exceed the amount of 5,000 EUR (five thousand euro) when participating in the Issuer's Token Conversion over any 30 months.

ETHERNITY CLOUD shall treat a Participant as an Experienced Investor if such Participant declares that:

- they have already participated in other offerings of VFAs; and
- they have invested in VFAs more than 10,000 EUR (ten thousand euro) or its equivalent; and
- they possess the necessary experience, knowledge, and expertise to make their own investment decisions and properly assess the risks involved.

ETHERNITY CLOUD shall also treat the following as Experienced Investors :

- entities which are required to be authorized or regulated to operate in the financial markets;
- Large undertakings meeting two of the following size requirements on a company basis:
    - balance sheet total: 20,000,000 EUR, ○ net turnover: 40,000,000 EUR, ○ own funds: 2,000,000 EUR;
- national and regional governments, public bodies that manage public debt, central banks, international and supranational institutions such as the World Bank, the IMF, the ECB, the EIB, and other similar international organizations;

- other institutional investors whose main activity is to invest in VFAs, including entities dedicated to the securitization of assets or other financing transactions.

Furthermore, ETHERNITY CLOUD shall treat a Participant as an Experienced Investor if all of the following criteria are satisfied:

- the Issuer will undertake an adequate assessment of the expertise, experience, and knowledge of the Participant, and this assessment gives reasonable assurance, in the light of the nature of the transactions or services envisaged, that the Participant is capable of making their own investment decisions and of understanding the risks;
- in the course of the assessment referred to in point (a) above, as a minimum, two of the following criteria shall be satisfied:
    - the Participant has carried out transactions, in significant size, on the relevant market at an average frequency of 10 per quarter in the previous four quarters,
    - the size of the Participant's Virtual Financial Asset portfolio, defined as including cash deposits and Virtual Financial Assets exceeds, 500,000 EUR or its currency equivalent,
    - the Participant works or worked in a position, which requires knowledge of the transactions envisaged,
    - the Participant has worked in the financial sector for at least one year in a professional position;
- the following procedure is followed:
    - the Participant shall state in writing to the Issuer that they wish to be treated as an Experienced Investor,
    - the Issuer will give such Participant a clear written warning of the protections and investor compensation rights the Participant may lose, and
    - the Participant will state in writing in a separate document from the contract, that they are aware of the consequences of losing such protections.

5. ALLOCATION OF FUNDS

Goals to be achieved through the issuance of ECLD tokens and Token Conversion

This allocation consists of, but it is not not limited to, technology development, network fees in the form of other crypto-assets, R&D, recruitment and staff, collaborators, client acquisition, PR & marketing, lobbying, sales, product development, systems maintenance, administrative expenses, accounting, bookkeeping, and legal fees.

Products and Solutions Development

This includes *inter alia*:

- R&D;
- software and product development;
- human resources for product development;
- research;
- product maintenance.

This category also includes partnerships with other technological companies, universities and research facilities, internal R&D projects and processes for technology development, recruitment of product development-related specialists, advisors, infrastructure, and software required for advancement, the registrations of patents, copyright and copyleft, and acquisition of the intellectual property necessary.

Marketing and Sales

Funds allocated to this category will cover *inter alia* such costs of:

- marketing and PR staff salaries;
- sales staff salaries;
- market research services;
- marketing, lobby, and PR external services as per ETHERNITY CLOUD's marketing strategy;
- other sales-related expenses (actions required for effective sales processes);

- conferences, tickets and (on-/offline) events.

Operational expenses

This component consists of *inter alia*:

- management, operational, strategic, compliance, legal, advisory, and administrative staff remuneration;
- Accounting, bookkeeping, and banking fees;
- external general operational services (e.g., compliance);
- office and maintenance;
- acquisition of supporting goods and services;
- business travel expenses;
- other general administrative costs;

General Funding

Given the innovative nature of the protocol and evolving business landscape, the funds raised will also be allocated as reserves for unforeseeable expenses as well as for potential future opportunities to expand the ecosystem amongst others.

6. DELIVERY OF THE ECLD TOKENS - METHODS AND TIME LIMIT

ETNY TOKENS BOUGHT BEFORE THE TOKEN CONVERSION INTO ECLD TOKENS

ECLD Tokens will be distributed to the wallet address associated with the account of the respective Participant that went through the KYC procedure before the start of the token conversion.

The time limit for the delivery of the converted tokens is 28 business days.

If the Soft Cap is not reached until the end of the token conversion, namely until the end of the 60 months starting from the date of staking dApp launch (17 October 2022), the ETNY tokens will be returned in full to each Participant in the Wallet address used to subscribe for in the conversion. In each of the above cases, ECLD Tokens will be available to send/trade between users from the date specified as the end-date of the token conversion once the Soft Cap is reached.

A subscription for ECLD Tokens in terms of this token conversion shall be deemed complete upon the prospective Participant having successfully completed all AML and CFT procedures and ETNY tokens burnt from bloxberg whereas new ECLD tokens become minted on POLYGON as described herein by ETHERNITY CLOUD or any third party to which ETHERNITY CLOUD may have delegated such function.

Participants identified and who have satisfied the abovementioned requirements shall be eligible to undergo the token conversion of the ECLD Tokens in accordance with their subscription details embedded in the smart contract deployed by the Issuer for such purposes.

The timeframes for ECLD Tokens to be used by the respective Participants

After ECLD Tokens will be listed on one or more DLT Exchanges, or other intermediary authorized to buy/sell/trade/stake ECLD Tokens by the Issuer, these will be tradeable:

a. after the successful admission to trading facilities by the respective DLT Exchange or other intermediary authorized to buy/sell/trade/stake ECLD Tokens;

b. peer-to-peer (P2P exchange is immediately available and the associated risks identified in the Whitepaper and others that may arise are completely to be owned by the parties undertaking the exchange).

Where the Tokenholder opts to use ECLD Tokens in order to access services on the ETHERNITY CLOUD Ecosystem, ETHERNITY CLOUD aims to enable such functionality after the migration.

The Tokenholders will be updated on the respective timings via online communications (e.g., email, social media posts, on the official website of the Issuer).

Lastly, Tokenholders are entitled to contact ETHERNITY CLOUD (contact details available on the official website).

7. RETURN OF FUNDS IF THE SOFT CAP OF THE TOKEN CONVERSION IS NOT REACHED

Participants will be able to get their contributions back if the Soft Cap of the Token Conversion is not reached at the end of the subscription period for such purposes.

Be aware that this return of funds virtually refers to the fact that all Participants will be able to receive back their assets in the shape of the ETNY Tokens that will be locked in the Smart Contract until the Soft Cap is reached.

DISCLAIMER:

Thus, the development of the ETHERNITY CLOUD Project might continue the protocol on the initial blockchain and the token conversion into ECLD Tokens as VFAs under the Maltese regulatory framework until further notice.

Hence, even if the plan of ETHERNITY CLOUD is postponed because regulatory encumbrances, the vision remains the same, namely migration to POLYGON and one-on-one token conversion from ETNY (virtual token) to ECLD (virtual financial asset) Tokens.

Such a situational outcome might even postpone the advancement of the roadmap.

Ultimately, ETHERNITY CLOUD might opt for the migration to POLYGON without the token conversion to be completed for the Tokenholders, which implies that the ETNY tokens will be locked in a Smart Contract until further notice with the intent to eventually convert them into ECLD Tokens once the regulatory authorization is obtained by the Issuer from any other regulator.

In the event that the Soft Cap is not reached, the Issuer shall require the provision of alternative mechanisms for the return of such funds in the shape of ETNY tokens until the token conversion may take place under an authorized framework.

The Participants will be notified of how the refund mechanism will work for the reimbursement of the ETNY Tokens.

Notifications informing the Participant about the timing of the refund will be sent within 60 days after the initial token conversion process is abandoned as per the reason of the Soft Cap.

Then, the reverse transfer will occur within 90 days from the Issuer's address to the address of each Participant.

Consequently, the amount of the refund will correspond to the number of ETNY Tokens initially subscribed for the token conversion.

VII. ETHERNITY CLOUD PROJECT – ROADMAP

Please find below a detailed description of past and future project milestones and project financing rounds.

The roadmap can be accessed via the following link: https://ethernity.cloud/.

Q4 2017: The first whitepaper of ETHERNITY CLOUD is published.

Q1 2018: ETHERNITY CLOUD offers the first demo.

Q1 2020: Launch of the so-called Proof-of-Execution consensus mechanism on bloxberg's blockchain.

Q4 2020: ETHERNITY CLOUD launches the Testnet.

Q2 2021: ETHERNITY CLOUD closes the Private Round and open the Pre-Sales Round within the community.

Q3 2021: Sale of ETNY Tokens within the community opens.

Q2 2022: Launch of the Ethernity Cloud's ETNY Wallet.

Q3 2022: ETHERNITY CLOUD launches the ETNY Staking dApp, Smart Contracts, the Etherneals NFTs.

Q4 2022: Testnet update takes place and the Jupyter Notebook launches.

Q1-2 2023: ETHERNITY CLOUD includes two main features in the shape of data integrity and data confidentiality via SecureLock Enclave, TrustZone Enclave, and SwiftStream File Service; The Node.js template is released; Smart Contract Optimisations are performed; and the Etherneals NFTs are launched. New website launches.

Q3 2023: ETHERNITY CLOUD launches OpenBeta on 12-13 July and the Mainnet on bloxberg.

Q4 2023: ETHERNITY CLOUD seeks to register its Whitepaper in accordance with the VFA Act of Malta once the home regulator (MFSA) approves it.

An updated Smart Contract Compliance audit is performed.

Process confidentiality is integrated into the proposed solution via PrivateSphere.

Mainnet on bloxberg (three types of migration: contract migration, network migration, and application migration).

ETHERNITY CLOUD considers targeted exchange listing of the ECLD token as VFA under the VFA Act of Malta upon the successful registration of this Whitepaper.

Swap dApp launched on 20 November.

ECLD token listing on the first regulated centralized exchange from the BVI.

Q1-2 2024: ETHERNITY CLOUD launches decentralized DNS. Pending approval of the ECLD token as VFA under the VFA Act of Malta from the MFSA.

Q2-3 2024: ETHERNITY CLOUD SDK and two other decentralized applications launch.

VIII. THE ISSUER

ETHERNITY SWAP LIMITED (i.e., **the Issuer** of the Virtual Financial Assets) is a private limited liability company incorporated under the laws of British Virgin Islands on 3rd August 2023 for an indefinite period of time under the registration number 2129507 ("**the Issuer**"). The current Issuer was created to execute the ETHERNITY CLOUD Protocol Project and to develop the underlying technology and concept.

This Issuer's majority shareholder and UBO is Iosif Peterfi (natural person).

The Issuer was created to implement the ETHERNITY CLOUD Project and to develop the underlying technology to support this protocol as well as in the registration of the Whitepaper concerning its native utility token, namely the ECLD token, as a VFA under the VFA Act of Malta. The Issuer is pre-revenue and has a limited operating history.

The Issuer's principal activity is to develop and operate the ETHERNITY CLOUD Protocol as well as to focus on software development, PR and marketing, sales, and development of proprietary technology.

The Issuer is not involved in any legal proceedings having important an effect on the Issuer's financial position at the time of registration of this Whitepaper. The Issuer is not involved in any legal litigations.

1. ORGANISATIONAL STRUCTURE

Iosif Peterfi is the UBO and sole shareholder in Ethernity SWAP Ltd (BVI).

The Issuer's role in the token swap is to respect the roadmap from a timeline perspective by issuing and distributing the ECLD token to the primary market participants.

In Malta, the token Issuer is undergoing the regulatory approval as VFA under the VFA Act. The registration will be for the purpose of seeking admission to trading on DLT exchanges.

2. THE MANAGEMENT - ROLES AND RESPONSIBILITIES

Iosif Peterfi – CEO & CTO, Member of the Board of Administration

Iosif Peterfi, serving as the CEO and Member of the Board of Administration for Ethernity SWAP Ltd, is a seasoned technology professional with over two decades of experience in creating cutting-edge technology infrastructure projects. His specialized knowledge spans across system architecture, software development, and security solutions, including collaborations with the US Department of Defense.

Prior to spearheading ETHERNITY CLOUD, his contributions at the Max Planck Digital Library as a Systems Architect cemented his reputation in the field.

In his current role, Iosif leads a talented team of over 20 individuals at ETHERNITY CLOUD and undertakes the following responsibilities as CEO:

- Steers the operational management, ensuring a consistent communication pipeline with key stakeholders.
- Guides the execution of strategic and operational plans, adhering to the roadmap and complying with regulatory laws at local, European, and International levels.
- Develops and oversees the implementation of the organization's marketing strategy, offering direction and advice to the marketing team.
- Oversees critical contract negotiations, cultivates strategic partnerships, and maintains active communication with the organization's chief advisors.
- Ensures progress is consistently made towards achieving set milestones through regular monitoring and assessment.

- Plays an active role in the recruitment process, attracting and securing key collaborators and employees.
- Supervises the project management, closely working with the Chief Operational Officer (COO).

Under Iosif's guidance, Ethernity CLOUD is poised to redefine the boundaries of decentralized confidential cloud computing, not only within the European market but on a global scale. His unique blend of strategic vision and tactical expertise in both the technology and security sectors are key pillars in driving the mission and impact of ETHERNITY CLOUD.

Responsibilities at the Issuer as CTO:

- Identifying the technology stack and tools that will best support the project's objectives and developing a roadmap for the technical team.
- Overseeing the development of the project's software architecture and codebase.
- Working closely with the development team to ensure that the architecture is scalable, secure, and optimized for performance.
- Working with the development team to design and develop smart contracts that meet the needs of the project. This includes identifying the appropriate blockchain platform and programming language for the project, as well as ensuring that the smart contracts are secure, efficient, and well-audited.
- Overseeing the development of decentralized applications (DApps) that interact with the project's smart contracts.
- Managing and growing the development team.
- Recruiting, hiring, training, and retaining top talent, as well as establishing and maintaining a positive and productive team culture.
- Collaborating with other projects, communities, and platforms in the web3 space.

Ioan Munteanu – COO (Chief Operations Officer) & CBDMO

Ioan Munteanu, acting as the COO and Member of the Board of Administration for Ethernity SWAP Ltd, is an experienced executive with operational contributions to various national companies in Romania.

Responsibilities at the Issuer:

- general Strategic Management and Supervision:
  - strategic supervision over the technical domain,
  - strategic supervision of product and software development processes,
  - strategic supervision and participation in the administration, architecture design and implementation of ETHERNITY CLOUD's technical infrastructure;
- leading and managing the design, development, implementation, operation, maintenance and monitoring and control over the information security area, including coordinating security audits and related preparation processes, as well as the implementation of cybersecurity framework according to, among others, the Systems Audit Control Objectives;
- approving of the Issuer's system controls and risk migration strategies;
- maintaining and controlling the proper information security organizational structure, reporting processes and execution of procedures;
- scheduling and executing internal audits in the area of information security and business continuity;
- active participation in the recruitment processes and role delegation;
- participation in the product and concept design processes;
- controlling the Issuer's financial management;
- participation in meetings on both strategic and operational levels, including conferences and events.
- Analysing current and past financial data and providing strategies to cut costs and increase revenue;
- Leading the charge on market research plans to identify new opportunities;
- Working with executives to implement marketing strategies and new opportunities;
- Encouraging new clients by creating and improving proposals;
- Ensuring that the company meets revenue targets;

- Providing training and mentoring to other members of the team;
- Developing and pitching ideas for potential investors;
- Attending industry events to unlock business opportunities and form partnerships.

3. PARTNERS

VFA Agent

CSB Fintech Limited

Level 3,

Tower Business Centre,

Tower Street, Swatar,

BKR 4013, Malta - EU

MBR Registration Code: C 94249

LEI Code: 213800YL3YIBF1IG2248

Email: info@csbgroup.com

CSB Fintech Limited (hereinafter referred to as "CSB") forms part of CSB Group Malta (hereinafter referred to as the "Firm"), a member of the CSB Group network, which was established in Malta in 1987 and has grown into the country's leading firms. The Firm presently offers diverse yet specialised business solutions and commercial services to a vast portfolio of corporate and private clients seeking to setup a business or relocate to Malta. With a 100+ team of qualified professionals, we strive to be a partner of choice to our clients, providing them with tailor-made solutions, uniquely aimed at helping them succeed. CSB is registered by the Malta Financial Services Authority as a Virtual Financial Assets ("VFA") Agent on 6 January 2020, enabling CSB to support both VFA issuers in the registration of ICO whitepapers as well as VFA service providers in their licensing process.

Financial & Systems Auditor FACT Group

Cornerline, Dun Karm Street, Birkirkara, BKR9039. Malta.

FACT group is a multidisciplinary and forward-looking

small group of entities offering a wide range of professional & independent financial services

and advice ranging from accountancy, assurance, business advisory, local and international tax planning and compliance, corporate finance, management and legal support work, company formation & re-domiciliation, backoffice services, mergers and liquidations, staff recruitment, IT assurance & consulting work.

FACT Audit

Audit and assurance services, which are conducted through FACT Technologies Limited (Group) form a major part of the work. The Issuer does for their clients on a continuing or ad hoc basis. The team is particularly trained and experienced in the application of International Standards on Auditing (ISAs), International Financial Reporting Standards (IFRSs) as adopted by the EU and General Accounting Principles for Small and Medium Entities (GAPSME). Audit services are mainly composed of external statutory financial audits, the main scope of which is to form an opinion on the financial statements of a company. However, the statutory audit service is not limited to this function as our assurance team communicates any relevant audit findings to those charged with governance and offer recommendations to improve internal controls and/or accounting systems, in line with the overall FACT group policy of providing a value-added service.

FACT Technologies

FACT Technologies Ltd is an entity that forms part of FACT Group and specializes in information systems assurance and information security. Its aim is to assist companies that are looking at improving their operations, processes, controls, and standards when it comes to the use of IT in their businesses. The main service industries are the gaming and financial services industries, for whom The Issuer carries out specialized regulatory-related audits and other information security exercises to ensure compliance with legal requirements and proper awareness of how information security is managed. The team consists of experienced professionals in information assurance, penetration testers, and security auditors.

Legal Advisors

Sali Blockchain & Crypto Regulations

Krijn Taconiskade 123, 1087 HW, Amsterdam, Netherlands

GTG Advocates

66, Old Bakery Street, Valletta, VLT 1454, Malta

Money Laundering Reporting Officer (MLRO)

Neal Rossignaud, Independent Non-Executive Director & MLRO (Malta)

IX. INTELLECTUAL PROPERTY RIGHTS ASSOCIATED WITH THE OFFERING AND PROTECTION THEREOF

The term (i) "Intellectual and Industrial Property Rights- IPR" shall cover any and all of the following: (A) patents, utility models and applications therefor (including provisional applications, certificates of invention and applications for certificates of invention) and divisionals, continuations, continuations-in-part, patents of addition, reissues, renewals, extensions, registrations, confirmations, re-examinations and equivalents thereof throughout the world (collectively, "Patents"), (B) trade secrets, know-how, invention disclosures, proprietary information, inventions, discoveries, improvements, technology (including,

without limitation, allograft, and xenograft technology), technical data, formulas and research and development, whether patentable or not (collectively, “Trade Secrets”), (C) trademarks, service marks, trade names, trade dress, logos, commercial symbols, internet domain names, registrations and applications for any of the foregoing and the goodwill associated with any of the foregoing (collectively, “Trademarks”), (D) copyrights, mask works, derivative works, integrated circuit topographies, registrations and applications thereof, and equivalents thereof throughout the world (collectively, “Copyrights”), and (E) other intellectual property, industrial property and proprietary rights and all applications, registrations and grants related thereto;

(ii) “IP Contracts” shall mean all contracts or agreements to which The Issuer or any of its Subsidiaries is a party or beneficiary that assigns, sells, grants, or otherwise conveys (each individually, an “Assignment”) or licenses, waives, options, covenants not to enforce or otherwise obligates (each individually, a “License”) any rights under, in or to any Intellectual Property; (iii) “Registered Intellectual Property” shall mean any and all Intellectual Property that is the subject matter of an application, election, designation, certificate, filing, registration, recordation, acknowledgement, document or other communication issued by, filed with, or recorded by any Governmental Entity or other Person primarily responsible for issuing, filing or recording any of the foregoing (such Governmental Entity or other Person, a “Registration Authority”); (iv) “Owned IP Property” shall mean all Intellectual Property in which the Company or any of its Subsidiaries has an ownership interest; (v) “Licensed Property” shall mean all Intellectual Property that is licensed to The Issuer and its affiliates.

The ETHERNITY CLOUD Ecosystem consists mainly of software. Software is a form of algorithm that can be installed and run on computers and other computer-like devices for the purpose of providing certain utilities to its users. Software cannot be protected by the legal means available for patents, as it is a combination of technical and mathematical codes that give the effect of images, moving images, sound and content and it is considered as intellectual property. Since intellectual property rights are considered to be obtained automatically upon the result of the creation of the intellectual work (usually a software) in order to be fully protected by means of deposition which serve as proof of its date of existence, which can be linked with a specific trademark which provides for an industrial property right.

ETHERNITY CLOUD has made its best effort to safeguard its intellectual property rights on the ETHERNITY CLOUD Project. More specifically, its development team made use of open-source software for which ETHERNITY CLOUD has obtained a license to Derivative Works. As software cannot be registered under the patent law, but it is considered to be automatically protected upon its creation, the only way to register any Derivative Works or original software works is by registering them under a specific trademark. ETHERNITY CLOUD has executed all documents required to apply for, register, perfect, obtain or enforce any ownership and Intellectual Property Rights in or pertaining to any such Derivative Works, including, without limitation, any patent applications or copyright registrations, before starting the exploitation of such works with the signature of license agreements providing for specific remuneration rights (loyalties) limited in place, time, application or acquiring the whole ownership by the provision of a lump sum.

X. AML AND CFT POLICY

The management of ETHERNITY CLOUD recognizes that The Issuer is required to comply with the necessary anti-money laundering and counter financing of terrorism (AML and CFT) obligations in the British Virgin Islands. As a result, ETHERNITY CLOUD established the KYC and AML policy which details the obligations arising from the following laws, regulations, and any ancillary documents:

- the Prevention of Money Laundering Act, Chapter 373 of the Laws of Malta (PMLA);
- the Prevention of Money Laundering and Funding of Terrorism Regulation, Subsidiary Legislation 373.01 of the laws of Malta (PMLFTR);
- the Criminal Code, Chapter 9 of the laws of Malta; and
- Part 1 of the Implementing Procedures.

Moreover, the AML/CFT policy is to be updated by the acting MLRO of the Issuer, who shall bear responsibility for this policy, in order to include the requirements necessary for the Token

Conversion as per Part 2 of the Implementing Procedures as well as other provisions for such purposes.

AML and CFT measures shall be applicable to all Participants. Each Participant shall be subject to a customer risk assessment which will consider various risk factors including customer risk, countries or geographical areas, products, services, transactions, and delivery channels. Subsequently, customers shall be subjected to customer diligence (CDD) measures. The purpose of such measures is to identify and verify the identity of the customer and/or ultimate beneficial owners of legal persons and legal arrangements on the following occasions:

- when establishing a business relationship;
- when carrying out occasional transaction;
- when The Issuer has knowledge or suspicion of proceeds of criminal activity, money laundering or the funding of terrorism; and
- when doubts arise about the veracity or adequacy of the previously obtained customer identification information.

Customer due diligence measures shall also be applied, at appropriate times, to existing customers on a risk-sensitive basis, including at times when The Issuer becomes aware that the relevant circumstances surrounding a business relationship have changed.

ETHERNITY CLOUD shall adopt simplified due diligence in case of low-risk scenarios. Furthermore, The Issuer shall apply enhanced due diligence in line with the identified risk. The following scenarios shall always warrant enhanced measures:

- customers who have not been physically present for verification purposes;
- customers and/or ultimate beneficial owners who have been entrusted with prominent public function, a family member, or a close associate of same;
- activities or services that are determined to be of a high-risk;
- customers and/or ultimate beneficial owners linked to high-risk or non-reputable jurisdictions; and
- any other scenario which shall be deemed as high-risk.

FINAL DISCLAIMER:

The issuance of the ECLD token is not regulated, subject to prudential requirements, supervisory, nor monitoring by any national competent authority at the time of issuance in both the BVI and Malta. The activity of token issuance is not regulated by any law in the BVI. A legal opinion was sought and obtained on this matter. After MFSA's registration of ECLD as VFA, the said token becomes regulated under the VFA Act of Malta.

The Issuer implements precautionary specific measures to respect the AML regulatory framework of each jurisdiction. No public sale is virtually conduct for this token swap.

STATEMENT

– as per Article 4 (1) (c) of the Virtual Financial Assets Act of Malta –

We hereby declare that this Whitepaper complies with the requirements of Article 4 of the Virtual Financial Assets Act of Malta. Furthermore, the Board acknowledges that this Whitepaper is drafted as solicited by Article 4 (1) (c) of the Act, which demands that this document is in line with all the conditions set out in Article 3 of the Act

Therefore, the Members of the Board of Administration of the Issuer hereby confirm that the Whitepaper complies with the law, and more specifically, is in compliance with the requirements under the Virtual Financial Assets Act of Malta, its relevant regulations and the Rules.

Date: 24 October 2023
Updated: 20 November 2023

Signatures of the Members of the Board of Administration:

Iosif Peterfi, CEO & CTO **Ioan Munteanu (COO & CDMO)**