

IDOS TOKEN WHITE PAPER

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S.10	Energy Consumption Sources and Methodologies					
01	Date of Notification	<p>The present updated version of the white paper is notified to the Central Bank of Ireland on December 9, 2025.</p> <p>The white paper was first notified to the Central Bank of Ireland on November 7, 2025.</p>				
02	Statement in Accordance with Article 6(3) of Regulation (EU) 2023/1114	‘This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The offeror of the crypto-asset is solely responsible for the content of this crypto-asset white paper.’				
03	Compliance statement in Accordance with Article 6(6) of Regulation (EU) 2023/1114	‘This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 and, to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto- asset white paper makes no omission likely to affect its import.’				
04	Statement in Accordance with Article 6(5), points (a), (b), (c) of Regulation (EU) 2023/1114	‘The crypto-asset referred to in this white paper may lose its value in part or in full, may not always be transferable and may not be liquid.’				
05	Statement in Accordance with Article 6(5), point (d) of Regulation (EU) 2023/1114	‘The utility token referred to in this white paper may not be exchangeable against the good or service promised in the crypto-asset white paper, especially in the case of a failure or discontinuation of the crypto-asset project.’				

06	Statement in Accordance with Article 6(5), points (e) and (f) of Regulation (EU) 2023/1114	<p>'The crypto-asset referred to in this white paper is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council.</p> <p>The crypto-asset referred to in this white paper is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.'</p>
SUMMARY		
07	Warning in accordance with Article 6(7), second subparagraph of Regulation (EU) 2023/1114	<p>'WARNING</p> <p>This summary should be read as an introduction to the crypto-asset white paper.</p> <p>The prospective holder should base any decision to purchase this crypto – asset on the content of the crypto- asset white paper as a whole and not on the summary alone. The admission to trading of this crypto- asset does not constitute an offer or solicitation to purchase financial instruments, or an admission to trading of financial instruments and any such offer, solicitation or admission can be made only by means of a prospectus or other offer documents pursuant to the applicable national law.</p> <p>This crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council or any other offer document pursuant to Union or national law.'</p>
08	Characteristics of the Crypto-Asset	<p>The crypto-asset referred to in this white paper is the IDOS token ("Token"). The Token is the native token of the idOS Protocol ("Protocol") - a decentralized identity system and access management network specifically designed to store user data. The Token will be deployed in Arbitrum One.</p> <p>The Token is required to access and interact with the Protocol.</p>

09	<p>Key Information about the Quality and Quantity of the Goods or Services to which the Utility Token give Access</p> <p>Restrictions on Transferability.</p>	<p>By holding the Token, Token holders can:</p> <ul style="list-style-type: none">▪ Access the Protocol: The Token is required to access the benefits of the decentralized identity system; as the most prominent examples, the Token is necessary for:<ul style="list-style-type: none">▪ Users (as defined in D.04) to write their personal data in the Protocol;▪ Issuers (as defined in D.04) to write credentials on behalf of Users (as defined in D.04); and▪ Consumers to read the verified data.▪ Interact with the Protocol: The Token is required to become a Validator (as defined in D.04) of the Protocol. Token holders are also able to delegate some or all of their Tokens to a Validator. <p>The Token to be admitted to trading (see E12) are freely transferable.</p>						
10	<p>Key Information about the Offer to the Public</p>	<p>idOS Association (“Association”) intends to sell the Token through a public sale (“Public Sale”). The Public Sale presents the following characteristics:</p> <table><tr><td>Total Number of Tokens to be Offered within the EU</td><td>Up to 12.5 % of the overall Token total supply.</td></tr><tr><td>Subscription Period</td><td>Between December 2025 and Q1 2026. The definitive date will be communicated on the Issuer’s website (F.08) and/or the Issuer’s social media.</td></tr><tr><td>Minimum and Maximum Subscription Amount</td><td>Minimum subscription amount: Between USD 0 and USD 1 000 000</td></tr></table>	Total Number of Tokens to be Offered within the EU	Up to 12.5 % of the overall Token total supply.	Subscription Period	Between December 2025 and Q1 2026. The definitive date will be communicated on the Issuer’s website (F.08) and/or the Issuer’s social media.	Minimum and Maximum Subscription Amount	Minimum subscription amount: Between USD 0 and USD 1 000 000
Total Number of Tokens to be Offered within the EU	Up to 12.5 % of the overall Token total supply.							
Subscription Period	Between December 2025 and Q1 2026. The definitive date will be communicated on the Issuer’s website (F.08) and/or the Issuer’s social media.							
Minimum and Maximum Subscription Amount	Minimum subscription amount: Between USD 0 and USD 1 000 000							

				<p>Maximum subscription amount: USD 20 000 000 (if any see E.05)</p> <p>The subscription amounts may alternatively be denominated in crypto-assets and/or fiat depending on the selected payment methods (see below).</p>
			Issue Price (estimation)	<p>Between USD 0.02 and USD 1</p> <p>The final issue price may differ from the estimation, as it can be influenced by factors such as interest for the Protocol, comparable sales, economic circumstances, and the participation rate in the Public Sale as well as the past Community Sale (see white paper notified August 8, 2025). In any case, the final price will be communicated to potential Token purchasers in advance.</p> <p>The issue price may alternatively be denominated in crypto-assets and/or fiat depending on the selected payment methods (see below).</p>
			Payment Methods	<p>The on-chain payment method for the Public Sale will support at least one or several of the following fiat or crypto-assets: USDC/ ETH/USDT/USD</p>
			Subscription Fees (if any)	<p>The Association does not anticipate applying any subscription fee. However, the Third-Party Service Providers, if any, may apply one at their own discretion.</p>

		Target Holders of Tokens	Target holders of the Public Sale for the Token are retail and professional investors who are not sanctioned by OFAC or EU member states or Switzerland.
		Description of Offer Phases	At the time of notification, the Association does not expect to structure the Public Sale in multiple phases. Third party service providers, if any, may introduce phases at their sole discretion.
		Third-Parts Service Providers	The Association may resort to third party services providers (" Third Party Service Providers ") to support the Public Sale of the Token.
		CASP responsible for Placement of the Funds	Not applicable.
		Form of Placement	Not applicable.
		Admission to trading	Admission to trading within the EU is sought for the future (please refer to the white paper submitted on August 8, 2025, and most recent updates to the Central Bank of Ireland).

PART A – INFORMATION ABOUT THE OFFEROR		
A.01	Name	idOS Association
A.02	Legal Form	Swiss association (art.60-79 of the Swiss Civil Code)
A.03	Registered Address	Baarerstrasse 43 6300 Zug Switzerland
A.04	Head Office	Not applicable
A.05	Registration Date	June 26, 2024 Under Swiss law, an Association acquires legal existence on the date of its inaugural meeting which took place on June 26, 2024. While the Association was registered on August 29, 2025, in the commercial register, such registration is not a prerequisite for its legal existence.
A.06	Legal Entity Identifier	Not applicable.
A.07	Another Identifier Required Pursuant to Applicable National Law	Not applicable.
A.08	Contact Telephone Number	+41 32 513 78 85
A.09	E-Mail Address	legal@idos.network

A.10	Response Time (Days)	Inquiries are usually answered within 7 days. For specific or more complex requests - as determined and communicated by the Association - processing may take up to 10 days.		
A.11	Parent Company	Not applicable.		
A.12	Members of the Management Body	The Management Body is composed of:		
		Name	Business Address	Function
		Christopher Donovan	Baarerstrasse 43 6300 Zug Switzerland	President
		Anil Hansjee	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member
		Julian Leitloff	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member
		Lluís Bardet Alvarez -	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member
		Bruce Pon	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member
		Ruchir Dalmia	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member
		Rouven Heck	Baarerstrasse 43 6300 Zug Switzerland	Governance Committee Member

		The Governance Committee serves as the executive body of the Association with the authority to represent the Association externally vested in the individuals listed above.
A.13	Business Activity	The Association does not pursue commercial purposes and does not strive for profit. The purpose of the Association is to directly or indirectly further the growth and development of the open-source idOS (Identity Operating System) Protocol and the surrounding community, as well as the ecosystem.
A.14	Parent Association Business Activity	Not applicable.
A.15	Newly Established	True.
A.16	Financial Condition for the Past Three Years	Not applicable.
A.17	Financial Condition since Registration	<p>The Association was recently established under the laws of Switzerland and is not required to produce financial statements, as it does not meet the respective thresholds under Swiss law.</p> <p>The Association operates as an ecosystem entity and may benefit from the ecosystem's financial and operational support. Since its formation, the Association has received financial support amounting 3,041,474.88 USD from its ecosystem, consortium partners and the Community Sale.</p> <p>The treasury primarily holds USDC from the above revenue generated. At the date of notification of this white paper, Association anticipates to control 19.2% of the total Token supply. This percentage may evolve over the lifetime of the Association.</p>

		<p>As of December 9, 2025, the total operating expenses since establishment have amounted to approximately 2,340,000 USD, primarily covering legal costs, research and development (R&D), and human capital. To sustain operations and future initiatives, the Association plans to secure additional funding through a public sale of the Token.</p> <p>The Association has no outstanding liabilities, debts, or financial commitments and does not face any financial risks or uncertainties impacting its long-term sustainability.</p>
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PART B - INFORMATION ABOUT THE ISSUER, IF DIFFERENT FROM THE OFFEROR		
B.01	Issuer Different from the Offeror	False.
B.02	Name	Not applicable.
B.03	Legal Form	Not applicable.
B.04	Registered Address	Not applicable.
B.05	Head Office	Not applicable.
B.06	Registration Date	Not applicable.
B.07	Legal Entity Identifier	Not applicable.
B.08	Another Identifier Required Pursuant to Applicable National Law	Not applicable.

B.09	Parent Company	Not applicable.
B.10	Members of the Management Body	Not applicable.
B.11	Business Activity	Not applicable.
B.12	Parent Association Business Activity	Not applicable.
PART C- INFORMATION ABOUT THE OPERATOR OF THE TRADING PLATFORM IN CASES WHERE IT DRAWS UP THE CRYPTO-ASSET WHITE PAPER AND INFORMATION ABOUT OTHER PERSONS DRAWING THE CRYPTO-ASSET WHITE PAPER PURSUANT TO ARTICLE 6(1), SECOND SUBPARAGRAPH, OF REGULATION (EU) 2023/1114		
C.01	Name	Not applicable.
C.02	Legal Form	Not applicable.
C.03	Registered Address	Not applicable.
C.04	Head Office	Not applicable.
C.05	Registration Date	Not applicable.
C.06	Legal Entity Identifier of the Operator of the Trading Platform	Not applicable.
C.07	Another Identifier Required Pursuant to Applicable National Law	Not applicable.

C.08	Parent Company	Not applicable.
C.09	Reason for Crypto-Asset White Paper Preparation	Not applicable.
C.10	Members of the Management Body	Not applicable.
C.11	Operator Business Activity	Not applicable.
C.12	Parent Association Business Activity	Not applicable.
C.13	Other Persons Drawing up the Crypto- Asset White Paper According to Article 6(1), Second Subparagraph, of Regulation (EU) 2023/1114	Not applicable.
C.14	Reason for Drawing the White Paper by Persons Referred to in Article 6(1), Second Subparagraph, of Regulation (EU) 2023/1114	Not applicable.
PART D – INFORMATION ABOUT THE CRYPTO-ASSET PROJECT		
D.01	Crypto-asset Project Name	idOS Protocol
D.02	Crypto-Assets Name	IDOS Token
D.03	Abbreviation	\$IDOS

D.04	Crypto-Asset Project Description	<p><u>The Crypto-Asset Project</u> - The project, an open-source, composable and interoperable protocol, is designed to serve as a compliant, privacy-preserving and decentralized identity layer of web3. Its goal is to enable projects that require identity and user data management solutions to become more decentralized and gain user adoption, while giving data control back to the user.</p> <p><u>Network Participants</u> - People may assume the following roles within the Protocol:</p> <ul style="list-style-type: none"> ▪ Users (“Users”): Individuals who control their personal data with their own signature and encryption keys. ▪ Issuers (“Issuers”): Typically, these are organizations that verify the accuracy, authenticity, and compliance of the information provided by (and gathered on) the Users and issue credentials (signed attestations to a set of claims). ▪ Consumers (“Consumers”): Applications or services that request access to Users credentials. ▪ Validators (“Validators”): Private or legal entities that operate the Protocol’s nodes. They provide computation and storage services (consensus, authentication and authorization, data availability, data retrieval, data storage and deletion) and participate in securing the Protocol. <p><u>The Crypto-Asset</u> - The Token is the Network Token, for more details see (D.07).</p>
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D.05	Details of all Natural or Legal Persons Involved in the Implementation of the Crypto-Asset Project	<table border="1"> <tr> <th data-bbox="770 268 1151 308">Full Name</th><th data-bbox="1151 268 1527 308">Business Address</th><th data-bbox="1527 268 1908 308">Function</th></tr> <tr> <td data-bbox="770 308 1151 427">idOS Association</td><td data-bbox="1151 308 1527 427">Baarerstrasse 43 6300 Zug Switzerland</td><td data-bbox="1527 308 1908 427">Ecosystem Entity</td></tr> </table>	Full Name	Business Address	Function	idOS Association	Baarerstrasse 43 6300 Zug Switzerland	Ecosystem Entity
Full Name	Business Address	Function						
idOS Association	Baarerstrasse 43 6300 Zug Switzerland	Ecosystem Entity						
D.06	Utility Token Classification	True.						
D.07	Key Features of Goods/Services for Utility Token Projects	<p>By holding the Token, Token holders can:</p> <ul style="list-style-type: none"> ▪ Access the Protocol: The Token is required to access the benefits of the decentralized identity system; as the most prominent examples, the Token is necessary for: <ul style="list-style-type: none"> ▪ Users (as defined in D.04) to write their personal data in the Protocol; ▪ Issuers (as defined in D.04) to write credentials on behalf of Users (as defined in D.04); and ▪ Consumers to read the verified data. ▪ Interact with the Protocol: The Token is required to become a Validator (as defined in D.04) of the Protocol. Token holders are also able to delegate some or all of their Tokens to a Validator. 						
D.08	Plans for the token	<ul style="list-style-type: none"> ▪ Airdrops: Tokens are intended to be allocated to active community members on several occasions, through several programs. The first airdrop program was announced after the first version of the white paper was published (see white paper notified on August 8, 2025). Future airdrops (if any) have not yet been planned. ▪ Community Sale: November 2025. 						

		<ul style="list-style-type: none"> ▪ Public Sale: Between December 2025 and Q1 2026 (expected date, definitive date yet to be determined). Potential Token holders will be communicated the exact date on the Issuer's website (see F.08) and/or the Issuer's social media. ▪ Token Generation Event ("TGE"): Between Q4 2025 and Q1 2026 (expected date, definitive date yet to be determined). Potential Token holders will be communicated the exact date on the Issuer's website (see F.08) and/or the Issuer's social media. ▪ Token Distribution Event ("TDE"): Between Q4 2025 and Q1 2026 (expected date, definitive date yet to be determined). Potential Token holders will be communicated the exact date on the Issuer's website (see F.08) and/or the Issuer's social media. ▪ Listing within the EU/EEA on Trading Platforms: See F:09 (not defined yet)
D.09	Resource Allocation	The financial resources allocated to the project are further explained in A.17 above.
D.10	Planned Use of Collected Funds or Crypto-Assets	The funds raised during the public sale shall be used for the further development of the Protocol and the ecosystem.
PART E – INFORMATION ABOUT THE OFFER TO THE PUBLIC OF CRYPTO-ASSETS		
E.01	Offer	Offer to the Public (OTPC)
E.02	Reasons for the Offer	The reason is to finance the continued development of the Protocol and its ecosystem.
E.03	Fundraising Target	No specific target. The maximum possible amount.

E.04	Minimum Subscription Goals	<p>Between USD 0 and USD 1 000 000 (zero and one million dollars). The definitive minimum subscription will be available on the Issuer's website (see F.08).</p> <p>The minimum subscription goal may alternatively be denominated in crypto-assets and/or fiat depending on the selected payment methods (see E.24)</p>
E.05	Maximum Subscription Goal	<p>The total subscription amount is likely to be capped. At the time of the notification of this white paper, the cap is expected to be up to USD 20 000 000 (twenty million dollars).</p> <p>The maximum subscription goal may alternatively be denominated in crypto-assets and/or fiat depending on the selected payment methods (see E.24)</p>
E.06	Oversubscription Acceptance	No.
E.07	Oversubscription Allocation	Not applicable (see explanation under E.06).
E.08	Issue Price	<p>Between USD 0.02 and USD 1 (between zero point zero two and one dollar, initial estimation at the date of the notification).</p> <p>The final issue price may differ from the estimation, as it can be influenced by factors such as interest for the Protocol, comparable sales, economic circumstances, and the participation rate in the Public Sale and the past Community Sale (see white paper</p>

		<p>notified August 8, 2025 and most recent updates). In any case, the final price will be available on the Issuer's website (see F.08).</p> <p>The issue price may alternatively be denominated in crypto-assets and/or fiat depending on the selected payment methods (see E.24)</p>
E.09	Official Currency or any Other Crypto-Assets Determining the Issue Price	None.
E.10	Subscription Fee	The Association does not anticipate applying any subscription fee. However, the Third-Party Service Providers, if any, may apply one at their own discretion.
E.11	Offer Price Determination Method	The issue price will be determined by analysis of the issue price for similar projects based on comparable valuations and user bases. The Offeror may adjust the obtained price depending on the participation rate in the Public Sale and the past Community Sale (see white paper notified August 8, 2025 and updated versions) or change methodology if the comparable approach is no longer appropriate due to changes in market conditions. In all cases, the final issue price will be communicated to potential Token purchasers in advance.
E.12	Total Number of Offered / Traded Crypto-Asset	Up to 12.5% of the Token total supply.
E.13	Targeted Holders	ALL, meaning both Retail (RETL) and Professional (PROF).

E.14	Holder restrictions	<p>KYC checks with proof of identity, AML checks and address verification (e.g. geo-blocking) to exclude allocation to people on sanctions list.</p> <p>Additionally, Third-Party Service Providers, if any, may impose restrictions on Token buyers in accordance with applicable laws and their internal policies. These may include, among others, the successful completion of Know Your Customer (KYC) procedures, Anti-Money Laundering (AML) checks, and measures to combat the financing of terrorism (CFT).</p>
E.15	Reimbursement Notice	<p>‘Purchasers participating in the offer to this public of crypto-asset will be able to be reimbursed if the minimum target subscription goal is not reached at the end of the offer to the public, if they exercise the right to withdrawal foreseen in Article 13 of Regulation (EU) 2023/1114 or if the offer is cancelled’.</p>
E.16	Refund Mechanism	<ul style="list-style-type: none"> ▪ Minimum Subscription Goal Unreached: See E.04. ▪ Cancelled Offer: In such case, all Token purchasers will be refunded in full. ▪ Withdrawal Right: <ul style="list-style-type: none"> ▪ The retail Token holders - as defined under article 3 (1) (37) of MiCA and referenced in article 13 of MiCA - will need to send an email to legal@idos.network notify the exercise of their withdrawal right and will then be requested to follow the instructions provided. ▪ The retail Token holders do not need to justify or provide reasons for exercising their withdrawal right.

		<ul style="list-style-type: none"> ▪ While the procedure will not incur any fees or costs, the retail Token holder requesting a refund may be requested to pass some identity / KYC checks among others; and ▪ The refunds will be carried out in the same means of payment used for the initial transaction unless the retail Token holder expressly agrees otherwise and provided that the retail Token holder does not incur any fees or costs as a result of such reimbursement.
E.17	Refund Timeline	<ul style="list-style-type: none"> ▪ Reimbursement if Offer is Cancelled: No later than 25 calendar days after the date of cancellation of the Public Sale. ▪ Withdrawal Right: No later than 14 days from the date on which the Offeror is informed of the retail Token holder's decision to withdraw from the agreement to purchase the Token.
E.18	Offer Phases	At the time of notification, the Association does not expect to structure the Public Sale in multiple phases. Third Party Service Providers, if any, may introduce at their sole discretion phases.
E.19	Early Purchase Discount	Not applicable. At the time of notification, the Association does not anticipate applying for an early purchase discount. If the Association were to introduce an early purchase discount, the information will be available on the Issuer's website and would include an explanation as to why the purchase price may be different and a description of the impact on the other investors (F.08). Third Party Service Providers, if any, may introduce early purchase discounts at their sole discretion.

E.20	Time-Limited Offer	True.
E.21	Subscription Period Beginning	Between December 2025 and Q1 2026. The definitive date will be communicated on the Issuer's website (F.08) and/or the Issuer's social media.
E.22	Subscription Period End	Between December 2025 and Q1 2026. The definitive date will be communicated on the Issuer's website (F.08) and/or the Issuer's social media.
E.23	Safeguarding Arrangements for Offered Funds/Crypto-Assets	The Offeror shall have effective arrangements in place to monitor and safeguard the funds or other crypto-assets raised during the Public Sale. For that purpose, a custody agreement shall be entered into with a credit institution or a crypto-asset service provider providing custody and administration of crypto-assets on behalf of clients. More details will be available on the website of the Offeror (see F.08).
E.24	Payment Methods for Crypto-Asset Purchase	On-chain payments that will be denominated in at least one or several of the following fiat or crypto-assets: USDC /USDT/ETH or USD.
E.25	Value Transfer Methods for Reimbursement	The reimbursements shall be carried out using the same means of payment as that used by the retail Token holder for the initial transaction (see E.24), unless expressly agreed otherwise with the retail Token holder.

E.26	Right of Withdrawal	Retail holders who purchase Tokens from the Offeror shall have a right of withdrawal. More precisely, retail Token holders shall have a period of 14 calendar days within which to withdraw from their agreement to purchase the Token without incurring any fees or costs and without being required to give reasons. The period of withdrawal shall begin from the date of the agreement of the retail Token holder to purchase the Token.
E.27	Transfer of Purchased Crypto-Assets	Post TGE (whose definitive date is yet to be determined, see D.08), Token purchasers shall receive their Tokens either via a claim system (claim function linked to a smart contract) or automatically via a smart contract-based distribution. The allocation details will be available on the Issuer's website.
E.28	Transfer Time Schedule	The Token shall be transferred to the wallet addresses of the Token Public Sale purchasers on a date determined by the Offeror at its sole discretion, i.e., the TDE (Token Distribution Event, as defined in D.08). The TDE shall take place after the TGE. Providing an incorrect address or an address that does not technically support the Tokens may result in the Token recipient / purchaser not being able to access the allocated Tokens.
E.29	Purchaser's Technical Requirements	Any self-custodial EVM wallet that can connect to the Arbitrum One network. Token holders understand that would also need to comply with the technical requirements specific to the Third-Party Service Providers, if any, on which the Public Sale is organized, which may include, among others, (i) an internet access (ii) a compatible digital wallet or account on supported Third-Party Service Providers and (iii) a device (computer or mobile) to manage digital wallet/private key and/or account on exchange to carry out transactions.

E.30	Crypto-Asset Service Provider (CASP) Name	Not applicable. No Third-Party Service Providers have been identified at the time of the present notification. The list of CASP -Party Service Providers, if any, shall be available on the website of the Offeror (see F.08).
E.31	CASP Identifier	Not applicable.
E.32	Placement Form	Not applicable.
E.33	Trading Platforms Name	Not applicable.
E.34	Trading Platforms Market Identifier Code (MIC)	Not applicable.
E.35	Trading Platforms Access	Not applicable.
E.36	Involved Costs	Not applicable.
E.37	Offer Expenses	Not applicable.
E.38	Conflicts of Interest	Not applicable.
E.39	Applicable Law	Any dispute arising out of or in connection with the present white paper, the Association, and the Public Sale shall be governed exclusively by the laws of Switzerland, without regard to conflict of law rules or principles, except to the extent that such disputes are governed by applicable law pursuant to the terms and conditions of the respective Trading Platform on which the Token has been admitted for trading.
E.40	Competent Court	Any dispute arising out of or in connection with the present white paper, the Association and the Public Sale shall be resolved exclusively by arbitration, except to the extent that such disputes are subject to a dispute resolution mechanism set forth in the terms and

		<p>conditions of the respective Trading Platform on which the Token has been admitted for trading.</p> <p>The arbitral proceedings shall be conducted in accordance with the Swiss Rules of International Arbitration of the Swiss Arbitration Centre in force on the date on which the Notice of Arbitration is submitted in accordance with those Rules.</p> <ul style="list-style-type: none"> ▪ The number of arbitrators shall be three. ▪ The seat of the arbitration shall be Zürich, Switzerland. ▪ The arbitral proceedings shall be conducted in English. <p>A respective arbitral award may only be challenged before the Swiss Supreme Court on the limited grounds as provided in Article 190 para. 2 Swiss Private International Law Act, i.e. (i) improper constitution of the arbitral tribunal; (ii) incorrect decision on jurisdiction; (iii) award beyond the claims submitted or failing to decide all claims submitted; (iv) violation of a party's right to be heard or of its right to equal treatment; and (v) incompatibility of the award with public policy.</p>
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PART F – INFORMATION ABOUT THE CRYPTO-ASSET		
F.01	Crypto-Asset Type	Crypto-asset other than asset-referenced tokens and e-money tokens and more specifically a utility token.
F.02	Crypto-Asset Functionalities	<p>By holding the Token, Token holders can:</p> <ul style="list-style-type: none"> ▪ Access the Protocol: The Token is required to access the benefits of the decentralized identity system; as the most prominent examples, the Token is necessary for: <ul style="list-style-type: none"> ▪ Users (as defined in D.04) to write their personal data in the Protocol; ▪ Issuers (as defined in D.04) to write credentials on behalf of Users (as defined in D.04); and ▪ Consumers to read the verified data. ▪ Interact with the Protocol: The Token is required to become a Validator (as defined in D.04) of the Protocol. Token holders are also able to delegate some or all of their Tokens to a Validator.
F.03	Planned Application of Functionalities	The Token will be issued fully functional, i.e., with all functionalities described in F.02. While further applications may be introduced in the future, there is no commitment, promise or guarantee that such functionalities will be implemented.
<i>A description of the characteristics of the crypto-asset, including the data necessary for classification of the crypto-asset White Paper in the register referred to in Article 109 of Regulation (EU) 2023/1114, as specified in accordance with paragraph 8 of that Article</i>		
F.04	Type of White Paper	OTHR
F.05	The Type of Submission	MODI = Modify

F.06	Crypto-Asset Characteristics	The Token is a crypto asset other than asset-referenced tokens or e-money tokens of the Protocol and more specifically a utility token.
F.07	Commercial Name or Trading Name	IDOS Token
F.08	Website of the Issuer	https://idos.network/
F.09	Starting Date of the Offer	See E.21 and E.22.
F.10	Publication Date	December 19, 2025 (earliest possible intended publication date, may be subject to change and publish later).
F.11	Any other Services Provided by the Issuer	Not applicable.
F.12	Identifier of Operator of the Trading Platform	Not applicable.
F.13	Language or Languages of the White Paper	English.
F.14	Digital Token Identifier Code used to uniquely Identify the Crypto-Asset or each of the Several Crypto Assets to which the White Paper relates, where Available	Not applicable.

F.15	Functionally Fungible Group Digital Token Identifier, where Available	Not applicable.
F.16	Voluntary Data Flag	False.
F.17	Personal Data Flag	True.
F.18	LEI Eligibility	Not applicable. The Association is not required to provide an LEI under MiCA.
F.19	Home Member State	Ireland pursuant to Article 3 (33) (c) of Regulation.
F.20	Host Member States	<p>The Public Sale is passported in the following countries:</p> <ul style="list-style-type: none"> Austria Belgium Bulgaria Croatia Cyprus Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia

		Liechtenstein Lithuania Luxembourg Malta Netherlands Norway Poland Portugal Romania Sweden Slovakia Slovenia Spain
PART G – INFORMATION ON RIGHTS AND OBLIGATIONS ATTACHED TO THE CRYPTO-ASSETS		
G.01	Purchaser Rights and Obligations	The Token does not entail purchaser any rights or obligations. The Token enables the potential Token holders to access and interact with the Protocol.
G.02	Exercise of Rights and Obligations	Not applicable.
G.03	Conditions for Modifications of Rights and Obligations	Not applicable.
G.04	Future Public Offers	The Offeror may conduct future airdrops in the coming years, linked to community incentives (see white paper notified on August 8, 2025, and recent updates).
G.05	Issuer Retained Crypto-Assets	The Association plans to retain 19.2% of the Token total supply. This percentage may evolve over the lifetime of the Association.

G.06	Utility Token Classification	True.
G.07	Key Features of Goods/Services of Utility Tokens	<p>By holding the Token, Token holders can:</p> <ul style="list-style-type: none"> ▪ Access the Protocol: The Token is required to access the benefits of the decentralized identity system; as the most prominent examples, the Token is necessary for: <ul style="list-style-type: none"> ▪ Users (as defined in D.04) to write their personal data in the Protocol; ▪ Issuers (as defined in D.04) to write credentials on behalf of Users (as defined in D.04); and ▪ Consumers to read the verified data. ▪ Interact with the Protocol: The Token is required to become a Validator (as defined in D.04) of the Protocol. Token holders are also able to delegate some or all of their Tokens to a Validator.
G.08	Utility Tokens Redemption	Not applicable.
G.09	Non-Trading Request	True.
G.10	Crypto-Assets Purchase or Sale Modalities	Not applicable.
G.11	Crypto-Assets Transfer Restrictions	Not applicable.
G.12	Supply Adjustment Protocols	False.
G.13	Supply Adjustment Mechanisms	Not applicable.

G.14	Token Value Protection Schemes	False.
G.15	Token Value Protection Schemes Description	Not applicable.
G.16	Compensation Schemes	False.
G.18	Applicable Law	Any dispute arising out of or in connection with the present white paper, the Association, the Token and/or the Protocol shall be governed exclusively by the laws of Switzerland, without regard to conflict of law rules or principles.
G.19	Competent Court	<p>Any dispute relating to the present white paper, the Association, the Token and/or the Protocol shall be resolved exclusively by arbitration.</p> <p>The arbitral proceedings shall be conducted in accordance with the Swiss Rules of International Arbitration of the Swiss Arbitration Centre in force on the date on which the Notice of Arbitration is submitted in accordance with those Rules.</p> <ul style="list-style-type: none"> ▪ The number of arbitrators shall be three. ▪ The seat of the arbitration shall be Zürich, Switzerland. ▪ The arbitral proceedings shall be conducted in English. <p>A respective arbitral award may only be challenged before the Swiss Supreme Court on the limited grounds as provided in Article 190 para. 2 Swiss Private International Law Act, i.e. (i) improper constitution of the arbitral tribunal; (ii) incorrect decision on jurisdiction; (iii) award beyond the claims submitted or failing to decide all claims submitted; (iv) violation of a party's right to be heard or of its right to equal treatment; and (v) incompatibility of the award with public policy.</p>

PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY		
H.01	Distributed ledger technology	<p>Pursuant to article 3 (1) and (2) of MiCA, a Distributed Ledger Technology means a technology that enables the operation and use of distributed ledgers, i.e., an information repository that keeps records of transactions and that is shared across, and synchronized between, a set of DLT network nodes using a consensus mechanism.</p> <p>The Token is deployed on Arbitrum One - a Layer 2 rollup chain built on Ethereum. The Association leverages the Ethereum distributed ledger technology (DLT) for all token-related aspect.</p>
H.02	Protocols and technical standards	<p>The Token is an ERC-20 token deployed on Arbitrum One, a Layer 2 rollup chain built on Ethereum. Arbitrum One uses Ethereum-compatible technology, including the EVM and ERC-20 standards, and supports secure storage and transfer of crypto-assets via smart contracts. Transactions are processed off-chain and periodically posted on Ethereum using Arbitrum's optimistic rollup protocol.</p>
H.03	Technology Used	See field H.02.
H.04	Consensus Mechanism	<p>Arbitrum uses Ethereum's underlying proof-of-stake consensus for final settlement, while off-chain execution is secured via optimistic rollup fraud proofs. Anyone can challenge incorrect assertions under the BoLD (Bounded Liquidity Delay) protocol.</p>
H.05	Incentive Mechanisms and Applicable Fees	<p>Users pay gas fees in ETH, which are significantly lower than Ethereum L1 due to batch processing and compression.</p>
H.06	Use of Distributed Ledger Technology	False.

H.07	DLT Functionality Description	Not applicable.
H.08	Audit	False.
H.09	Audit outcome	Not applicable.
PART I – INFORMATION ON THE RISKS		
I.01	Public Sale Related Risks	<ul style="list-style-type: none"> ▪ Complexity Risk: The user interface may be too technical for potential Token purchasers to understand how to engage with the Public Sale. For example, a potential Token holder may not understand transaction verification challenge can be successfully completed. ▪ Third Party Service Provider: The Association may resort to third party services providers to support the Public Sale of the Token. As the Association does operate, nor control, oversee, or manage the functioning of the services provided by the Third-Party Service Provider, it implies that: <ul style="list-style-type: none"> ▪ Any legal relationship between Token holders and the Third-Party Service Providers is governed solely by the terms and conditions set by the Launchpad at its discretion. ▪ The Association assumes no responsibility or liability for the operations, services, security, performance, or any outcomes - whether financial or technical - arising from transactions conducted through the Third-Party Service Providers. Technical disruptions or failures could adversely affect the Public Sale, the value of the Token and/or the situation of Token holders; and ▪ The Association provides no assurances regarding the Third-Party Service Provider itself and assumes no responsibility or liability for any regulatory, compliance, operational, financial, technical, or reputational failures that may

		<p>adversely affect its activities. This includes, but is not limited to, circumstances where such failures result in disruptions, halting or ceasing the Third-Party Service Providers' services entirely, due to sanctions, bankruptcy, cyber-attacks, technical disruptions or alike. The foregoing may result in substantial or even total losses for the Token holders.</p> <ul style="list-style-type: none"> ▪ Accessibility Risk: Potential Token purchasers understand that their wallet may not be compatible with the public sale venue's website. They are invited to check the technical requirements. ▪ Technical Risk: Potential Token purchasers understand public sale interface experiences downtime. There is a risk the public sale interface does not adequately or fully recover from a recovery process, and transactions are either incomplete or partially incomplete. ▪ Custody Risk: Potential Token purchasers understand that the public sale rely on third-party services such as custodian which are required under article 10 of MiCA to safeguard the funds or crypto-assets raised during the offer. These providers may be susceptible to security breaches, operational failures, and regulatory non-compliance, or bankruptcy which could lead to the loss or theft of the crypto-assets or funds or result in the crypto-assets or funds becoming part of the custodian's bankruptcy estate. ▪ AML / CFT Risk: Potential Token purchasers may fail to successfully pass anti money laundering (AML) and counter-terrorist financing (CFT) checks and may be subsequently excluded from the public sale. ▪ Unanticipated Risk: In addition to the risks outlined in this Section, unforeseen risks may arise. Additionally, new risks could emerge such as unexpected variations or combinations of the risks discussed in these Sections I.01 to I.05.
I.02	Issuer -Related Risks	<p>The offeror, i.e., the Association is simultaneously the entity controlling the technical minting of the Token. As such, the offeror qualifies as the issuer within the meaning of article (3) (1) (10) of MiCA. Given that the issuer and the offeror are the same entity, and for the sake of</p>

		<p>consistency, statements related to the issuer shall be deemed as statement related to the offeror, i.e., the Association.</p> <ul style="list-style-type: none"> ▪ Abandonment / Lack of Success Risk: This is the risk that the activities of the Association must be partially or totally abandoned for several reasons including, but not limited to, lack of interest from the public, lack of funding, incapacitation of key developers and project members, force majeure (including pandemics and wars) or lack of commercial success or prospects. ▪ Project Change Risk: The project of the Association, for which the Protocol serves as the implementation, may evolve over time. This could involve pivoting from its original vision, or modifying how that vision is executed. Such changes may be driven by market conditions, regulatory developments, technological advancements, or strategic decisions by the project's team. While adaptation can foster innovation and resilience, it also introduces risks, including shifts in value proposition and potential misalignment with prior expectations. ▪ No Protocol Control Risk: The Protocol may not be operated or controlled by the Association. Should potential Token holders interact with the Protocol, they are engaging directly with the Protocol and potentially with third parties that have no relationship to the Association. This means the Association does not oversee or manage these interactions, nor does it assume responsibility for any outcomes that may arise. ▪ Withdrawing Partners Risk: This is the risk that the Association faces in its business relationships with one or more third parties. The implementation of the Protocol depends strongly on the collaboration and functioning of services provided by several third parties and other crucial partners. Loss or changes in the project's leadership or key partners can lead to disruptions, loss of trust, or project failure. The Association cannot guarantee that the Protocol and the related project will be successfully developed and deployed.
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		<ul style="list-style-type: none"> ▪ Legal and Regulatory Compliance Risk: Crypto-assets and blockchain-based technologies are subject to evolving regulatory landscapes worldwide. Regulations vary across jurisdictions and may be subject to significant changes. This could lead to changes with respect to offering or trading of the Token and increase the Association's costs and/or obligations in offering or admitting the Token for trading. Changes in laws or regulations may negatively impact the value, legality, or functionality of the Token. Non-compliance can result in investigations, enforcement actions, penalties, fines, sanctions, or the prohibition of the trading of the Token impacting its viability and market acceptance. The Association could also be subject to private litigation. ▪ Operational Risk: Any failure to develop or maintain effective internal control or any difficulties encountered in the implementation of such controls, or their improvement could harm the business of the Association, causing disruptions, financial losses, or reputational damage. ▪ Industry Risk: The Association is and will be subject to all the risks and uncertainties associated with any new venture, visionary projects, including the risk that the Association will not be able to realize its purpose or vision about the Protocol and the project. Other projects may have the same or a similar vision as the Association. Many of such other projects are profit-oriented, substantially larger and have considerably greater financial, technical and marketing resources than the Association does, and thus may attract more participants than the Protocol, the project and the ecosystem initiated by the Association. ▪ Reputational Risk: The Association faces the risk of negative publicity, whether due, without limitation, to operational failures, security breaches, or association with illicit activities, all of which can damage the Association's reputation and, by extension, the value and acceptance of the Token. ▪ Competition Risk: There are several other crypto-assets and projects, and new competitors may enter the market at any time. The effect of new or additional competition on the Token or its market price cannot be predicted or quantified. Competitors may have significantly greater financial and legal resources than the
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		<p>Association and there is no guarantee that the Association will be able to compete successfully, or at all, with such competitors. Moreover, increased competition may severely impact the profitability and creditworthiness of the Association.</p> <ul style="list-style-type: none"> ▪ Unsolicited Admission to Trading Risk: Third parties can elect to support Tokens on their Trading Platforms without any request or authorization or approval by the Association or anyone else. As a result, Token integration on any third-party platform does not imply any endorsement by the Association that such third-party services are valid, legal, stable or otherwise appropriate. ▪ Unanticipated Risks: In addition to the risks outlined in this Section, unforeseen risks may arise. Additionally, new risks could emerge such as unexpected variations or combinations of the risks discussed in these Sections I.01 to I.05.
I.03	Crypto-Assets-Related Risks	<ul style="list-style-type: none"> ▪ Market Risk: Crypto-assets, including the Token, are highly volatile and can experience significant price swings in short periods, increasing the risk of sudden and substantial losses. Such valuation risk arises as the market value of a crypto-asset may not always reflect its underlying utility or fundamentals and is subject to subjective assessment. Potential Token holders are thus exposed to potential for losses due to the Token's: <ul style="list-style-type: none"> ▪ Potential fluctuations in value, driven by various factors such as supply and demand dynamics, investor sentiment, and broader market trends, incl. changes in interest rates, general movements in local and international markets technological advancements, regulatory changes, and media coverage. Notably, momentum pricing of crypto-assets has previously resulted, and may continue to result, in speculation regarding future appreciation or depreciation in the value of such assets, further contributing to volatility and potentially inflating prices at any given time. ▪ Liquidity risk, where a lack of depth in secondary markets - if any - or limited trading volumes can hinder the ability to execute trades at favorable prices,

		<p>which could lead to significant losses, especially in fast-moving market conditions. As a result, holders of Tokens may experience challenges in managing their holdings, with the value of the asset subject to unpredictable fluctuations and potential depreciation.</p> <ul style="list-style-type: none"> ▪ Solvency and collateral risk, if the Token is used to finance further activities, especially in leveraged positions or as collateral for loans. Significant fluctuations in the value of the Token could adversely affect the solvency of its holder particularly if the Token is pledged as collateral. A drastic decline in its value may trigger margin calls or automatic liquidations, which could further depress the Token's price, creating a negative feedback loop. This volatility poses the risk of forced asset sales, potentially resulting in substantial losses for the holder and amplifying downward pressure on the market price of Tokens. ▪ Custodial Risk: The method chosen to store Tokens, like any crypto-asset, carries inherent risks related to the security and management of the storage solution. The chosen storage method - whether hot or cold wallets, or centralized custody - can significantly impact the safety, liquidity, and accessibility of Tokens, with direct consequences for the holder's ability to access, trade, or retain their assets. ▪ Scam Risk. This is the risk of loss resulting from a scam or fraud suffered by Token holders from other malicious actors. These scams include – but are not limited to – phishing on social networks or by email, fake giveaways, identity theft of the Company or its management body, creation of fake Tokens, offering fake Token airdrops, among others. ▪ Anti-Money Laundering/Counter-Terrorism Financing Risk: This is the risk that crypto-asset wallets holding Token or transactions in Token may be used for money laundering or terrorist financing purposes or identified to a person known to have committed such offenses. There is thus a risk that a public address holding Tokens could be flagged in relation to Anti-Money Laundering or Counter- Terrorism Financing efforts. In such cases, receiving Tokens could result in the holder's address being flagged by relevant authorities, Exchanges, or other service providers, which may lead
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		<p>to restrictions on transactions or the freezing of assets. Consequently, holders of Tokens may face legal or regulatory challenges if their address becomes associated with illicit activities, impacting their ability to freely access, trade, or transfer their Tokens.</p> <ul style="list-style-type: none"> ▪ Taxation Risk: The taxation regime that applies to the trading of Tokens by either individual holders or legal entities will depend on each potential Token holder's jurisdiction. The Association cannot guarantee that the holding of Tokens, the reception of the Token, conversions of fiat currency against Tokens, or conversions of other crypto-assets against Tokens, will not incur tax consequences. It is the potential Token holder's sole responsibility to comply with all applicable tax laws, including, but not limited to, the reporting and payment of income tax, wealth tax or similar taxes arising in connection with the appreciation and depreciation of the Token. ▪ Market Abuse Risk: The market for crypto-assets is rapidly evolving, spanning local, national, and international platforms with an expanding range of assets and participants. Any market abuse, along with a potential loss of confidence among holders, could adversely impact the value and stability of the Token. Notably: <ul style="list-style-type: none"> ▪ Significant trading activity may take place on systems and platforms with limited oversight and predictability. Sudden and rapid changes in the supply or demand of a crypto-asset, particularly those with low market capitalization or low unit prices, can result in extreme price volatility. ▪ Additionally, the inherent characteristics of crypto-assets and their underlying infrastructure may be exploited by certain market participants to engage in abusive trading practices such as front-running, spoofing, pump-and-dump schemes, and fraud across different platforms, systems, or jurisdictions. ▪ Legal and Regulatory Risk: There is a lack of regulatory harmonization and cohesion globally, which results in diverging regulatory frameworks and possible further regulatory evolutions in the future. These could negatively impact the value, utility, and
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		<p>overall viability of the Token and, in extreme cases, force the Association to cease operations. Notably:</p> <ul style="list-style-type: none"> ▪ While the Token does not create or confer any contractual or other obligations against any party, certain non-EU regulators may nevertheless classify them as securities, financial instruments, or payment instruments under their respective legal frameworks. Such classifications could impose specific regulatory constraints, leading to significant changes in how the Token is structured, issued, purchased, or traded. ▪ Evolving regulations could substantially increase the Association's compliance costs and operational burdens related to facilitating transactions in the Token. ▪ New or restrictive regulations could result in the Token losing functionality, depreciating in value, or even becoming illegal or impossible to use, buy, or sell in certain jurisdictions. ▪ Regulators could take enforcement action against the Association if they determine that the Token constitutes a regulated instrument or that the Association's activities violate existing laws. Such actions could expose the Association, its affiliates, directors, and officers to legal and financial penalties, including civil and criminal liability. ▪ Unanticipated Risks: In addition to the risks outlined in this Section, unforeseen risks may arise. Additionally, new risks could emerge such as unexpected variations or combinations of the risks discussed in these Sections I.01 to I.05
I.04	Project Implementation-Related Risks	<ul style="list-style-type: none"> ▪ Novel Ecosystem Risk: The potential Token holder understands and acknowledges that the ecosystem, as evolving around the Protocol, is built on emerging and rapidly evolving technologies, which inherently carry significant risks. The underlying software, blockchain infrastructure, smart contracts, and related technologies are still in their early stages of development, meaning there is no guarantee that the process of receiving, using, or holding Tokens will be uninterrupted or error-free. As with any

		<p>novel technology stack, there is an inherent risk that the underlying blockchain, smart contracts, or associated components may contain weaknesses, vulnerabilities, or bugs, despite audits being conducted. Such issues could lead to unintended behaviors, security breaches, or critical failures, potentially resulting in the partial or complete loss of Tokens or their functionality. Additionally, unforeseen technical limitations, incompatibilities, or the emergence of superior alternatives could further impact the stability, security, and long-term viability of the ecosystem.</p> <ul style="list-style-type: none"> ▪ Withdrawing Partner Risk: The potential Token holder understands and accepts that the feasibility of the Protocol as a whole depends strongly on the collaboration of services providers and other crucial partners. The potential Token holder therefore understands that there is no assurance that the Protocol as a whole will be successfully implemented. ▪ Suitability Risk: (i) The Protocol will be deployed on an "as is" and "as available" basis, with reasonable level of care but without warranties of any kind, and the Association expressly disclaims all implied warranties as to the Token, the Protocol including, without limitation, implied warranties of merchantability, fitness for a particular purpose, title and non-infringement; (ii) the Association does not warrant that the Token and/or, the Protocol are reliable, current or error-free, meet the Token's requirements, or that defects in the Token and/or the Protocol will be corrected; and (iii) the Association cannot and does not warrant that the Token, the software code of the Token smart contracts, or the delivery mechanism for Token or the Protocol, are free of viruses or other harmful components. ▪ Unanticipated Risks: In addition to the risks outlined in this Section, unforeseen risks may arise. Additionally, new risks could emerge such as unexpected variations or combinations of the risks discussed in these Sections I.01 to I.05.
I.05	Technology-Related Risks	<p>The offeror and its affiliate, directors and officers shall not be responsible or liable for any damages, losses, costs, fines, penalties or expenses of whatever nature, whether reasonably foreseeable by them and the potential Token holder, and which the potential Token holder, may</p>

		<p>suffer, sustain, or incur, arising out of or relating to the technical risks outlined below or a combination thereof.</p> <ul style="list-style-type: none"> ▪ General Cybercrime Risk: The potential Token holder acknowledges that, despite best efforts to enhance security, the technological components supporting the Token - including its blockchain infrastructure, smart contracts, wallets - may be vulnerable to cyberattacks. Malicious actors may exploit software vulnerabilities, attack consensus mechanisms, or compromise private keys to gain unauthorized access to Tokens. Risks include hacking attempts on the Protocol, smart contract exploits, phishing attacks, malware infections, and other forms of cybercrime that could result in the theft, loss, or unauthorized transfer of Tokens. Since digital assets exist entirely in a technological environment, they are inherently exposed to evolving cyber threats, some of which may be undetectable or irreparable until after significant damage has occurred. ▪ Blockchain-Level Risk: The potential Token holder understands and accepts that, as with other blockchains, the blockchain used for the issuance of the Token could be susceptible to consensus-related attacks, including but not limited to double-spend attacks, DDoS attacks, majority validation power attacks, censorship attacks, and byzantine behavior in the consensus algorithm, Sybil attacks or be subject to forks. Any successful attack or fork presents a risk to the Token, the expected proper execution and sequencing of Token-transactions and the expected proper execution sequencing of contract computations as well as the token balances in the wallet of the potential Token holders. ▪ Smart Contract-Level Risk: The issuance and transfers of Tokens rely on smart contracts deployed on a blockchain network, which introduce specific technical and security risks. <ul style="list-style-type: none"> ▪ Smart contracts are self-executing, meaning any vulnerabilities, coding errors, or unforeseen logic flaws in the issuance contract could result in unintended consequences, such as the incorrect distribution of tokens, loss of funds, or
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		<p>permanent locking of tokens. Additionally, smart contracts are exposed to potential exploits, including hacking attempts, reentrancy attacks, and other forms of malicious activity that could compromise the security of the issuance process.</p> <ul style="list-style-type: none"> ▪ Once deployed, the smart contract governing the issuance of Tokens cannot be easily altered or corrected, meaning any discovered vulnerabilities may be difficult or impossible to fix without significant coordination, community approval, or even a network fork. Furthermore, changes to the underlying blockchain protocol—such as updates to consensus mechanisms, transaction processing rules, or gas fee structures—could affect the functionality or cost efficiency of the issuance smart contract. These risks could lead to disruptions in token issuance, security breaches, or a loss of confidence in the ecosystem, potentially impacting the Token's value and usability. ▪ Protocol-Level Risk: It cannot be excluded that any technical failure, malfunction, attack, upgrade or vulnerability within the Protocol could directly or indirectly impact the value of the Token. <ul style="list-style-type: none"> ▪ The Protocol could be subject to critical exploits, such as reentrancy attacks, logic errors, or oracle manipulation, which could lead to unintended token transfers, assets being drained from the system, or Tokens being irretrievably lost. Fixing such issues may require significant coordination, governance approval, or even disruptive measures such as protocol migrations or forks, none of which are guaranteed to be successful. ▪ The Supply chain for the encryption technology used by the Protocol may be infiltrated by nefarious actors to gain privileged access to the Protocol. ▪ The Protocol could require an upgrade (for example, without limitation, to address a security concern), which could lead to a temporary halt of the Protocol or cause unforeseen disruptions to transactions on the Protocol.
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		<ul style="list-style-type: none"> ▪ Third-Party Risk: Crypto-assets such as the Token often rely on third-party services such as exchanges and wallet providers for trading and storage. These providers can be susceptible to security breaches, operational failures, and regulatory non-compliance, which can lead to the loss or theft of crypto-assets. The Protocol encapsulate young technologies, which is why there is no warranty that the process for receiving, using, and holding the Token will be uninterrupted or error-free and that there is an inherent risk that the underlying blockchain, the smart contracts thereon, as well as any related technologies or concepts could contain weaknesses, vulnerabilities or bugs causing, inter alia, the complete loss of Token or its functionality. <p>Unanticipated Risks: In addition to the risks outlined in this Section, unforeseen risks may arise. Additionally, new risks could emerge as unexpected variations or combinations of the risks discussed in these Sections I.01 to I.0</p>
I.06	Mitigation Measures	While security tests are intended to be conducted before the token launch, potential Token holders understand that the risks outlined in Parts I.01 to 1.05 above are inherent to the Protocol activities and the broader ecosystem, making elimination impossible.

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

J.01	Adverse impacts on climate and other environment-related adverse impacts	<p>The Association is providing information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to validate transactions of the Token and to maintain the integrity of the distributed ledger of transactions.</p> <p>The energy consumption for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions for the period is estimated to be lower than 500'000 kWh. The figure provided in S.08 is intended to reference annualized amounts.</p> <p>As the Protocol is not live at the time of the present notification, the figures provided covers the period from August 8, 2025, to August 8, 2026, based on the anticipated number of nodes to be operated in the coming year and their respective energy consumption. If the effective consumption were to significantly differ from the estimated amount, the Association would update the above number.</p>
S.02	Name	idOS Association
S.03	Relevant legal entity identifier	Not applicable.
S.04	Name of the crypto-asset	IDOS Token
S.05	Consensus Mechanism	See H.04
S.06	Incentive Mechanisms and Applicable Fees	See H.05

S.07	Beginning of the period to which the disclosure relates	August 8, 2025.
S.08	End of the period to which the disclosure relates	August 8, 2026.
S.09	Energy consumption	<p>< 500'000 kWh</p> <ul style="list-style-type: none"> ▪ 7,728 kWh/year from the idOS node network ▪ 7,008 kWh/year from Arbitrum One
S.10	Energy consumption sources and methodologies	<ul style="list-style-type: none"> ▪ The idOS Node Network <p>Existing idOS production nodes run on AWS t3.xlarge instances (4 vCPUs and 16 GiB of RAM). In addition to these nodes, there is one gateway server with much lower specs, but for the purpose of these estimates the Association will assume it's as power-hungry as a node.</p> <p>Estimated Energy Consumption of an AWS t3.xlarge Instance</p> <p>**<u>Instance Specs</u>**</p> <p>AWS t3.xlarge – 4 vCPUs and 16 GiB of RAM (memory).</p> <p>**<u>Usage Scenario</u>**</p>

		<p>Running 24/7 for a full year (8,760 hours) at 100% CPU utilization on all vCPUs and with 100% memory usage (sustained maximum workload). This represents the worst-case, continuous full load scenario.</p> <p>**<u>Power Usage Effectiveness (PUE)</u>**</p> <p>The data center overhead (cooling, power delivery, networking) using an industry-standard PUE value is included. Modern efficient data centers often achieve PUE around 1.2–1.4, whereas older or average facilities may be ~1.5 (source). For this estimate, a PUE of 1.4 (mid-range of 1.2–1.5) will be applied to account for overhead in a typical large-scale AWS data center.</p> <p>Base Power Draw at 100% Load (Server-Level)</p> <p>To estimate the instance's power consumption (Watts) under full load, the two main contributors: CPU and memory must be considered. Research and industry data indicate that CPU and RAM usage dominate server power draw (source), with other components (disk, NIC, etc.) being relatively minor for compute-heavy workloads. All assumptions below use publicly available averages for similar hardware:</p> <p>**<u>CPU Power</u>**</p> <p>Each vCPU (virtual CPU) at 100% utilization consumes on the order of a few watts. One empirical study on AWS instances found that a 4 vCPU instance (c5.xlarge) drew about 20 W at ~80% CPU load (source) – roughly 5 W per vCPU. Extrapolating to 100% usage (and considering high-end workloads like AVX instructions), it is assumed ≈6 W per vCPU at full throttle. For 4 vCPUs, this yields an estimated ~24 W from CPU usage alone. *(Note: Other methodologies, such as Cloud Carbon Footprint, suggest a somewhat lower ~3.5 W per vCPU for AWS on average (source). Here ~6 W/vCPU is chosen to ensure a maximum power estimate under heavy load.)*</p>
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		<p><u>**Memory Power**</u></p> <p>DRAM power is significant even at full CPU load. Manufacturer data indicates roughly 0.38–0.41 W per GB of DDR4 memory in use (source). Using ~0.40 W/GB as a rule of thumb, the instance's 16 GiB RAM would draw about 6.4 W when fully utilized. (This aligns with other sources that use ~0.392 W/GB as an average for memory (source))</p> <p>Adding these together, the server-level power consumption for a t3.xlarge at 100% load is on the order of:</p> <ul style="list-style-type: none"> - CPU (4×6 W) + Memory (~6 W) ≈ 30 W (watts) total IT load for the instance. <p>Annual Energy Use Calculation</p> <p>Given the above ~30 W power draw by the instance during full-load operation, the Association converts this to annual energy consumption:</p> <ul style="list-style-type: none"> - Convert to kW: 30 W is 0.030 kW (kilowatts). - Multiply by Hours: Running continuously for 8,760 hours/year, the IT equipment energy = 0.030 kW × 8,760 h ≈ 262.8 kWh per year. This figure represents the energy used by the server *hardware* allocated to the t3.xlarge instance over one year of 24/7 full utilization. <p>Now the PUE = 1.4 is incorporated to include data center overhead. A PUE of 1.4 means that for every 1 kWh consumed by IT equipment, an additional 0.4 kWh is used for cooling, power distribution losses, and other facility overhead (source). The calculation is as follows:</p> <ul style="list-style-type: none"> - Total (with overhead) = IT Energy × PUE = 262.8 kWh × 1.4 ≈ 368 kWh per year. <p>In other words, about **368 kWh/year** of energy is drawn from the grid to run this instance at full load when accounting for typical data center inefficiencies. If a more efficient facility with PUE 1.2 is used, the annual consumption would be lower (~315 kWh/year), whereas a higher</p>
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	<p>PUE of 1.5 (older data center) would yield ~394 kWh/year. Our estimate (~368 kWh/year) is in the middle of the industry PUE range, reflecting a modern but not perfect efficiency data center.</p> <p>Conclusion</p> <p>Under the stated worst-case assumptions, an AWS t3.xlarge instance running 24/7 at 100% CPU and memory utilization would consume on the order of 370 kWh per year. This includes both the server’s own power draw and an allowance for data center overhead (cooling, power delivery inefficiencies) via a PUE factor. All calculation steps and assumptions – from per-component power (CPU, RAM) to hours and PUE – are detailed above, using industry-average values and publicly available data. The result provides a reasonable maximum annual energy consumption estimate (368 kWh/year) for a t3.xlarge instance under continuous full-load conditions, which can be adjusted slightly up or down depending on the exact PUE of the data center (1.2–1.5 range) and the efficiency of the underlying hardware.</p> <p>The idOS network today runs 4 nodes and one gateway server, but the Association aims for 20 nodes. This number of nodes (20) is used as an assumption for the calculation. Given our calculations above, this would add up to a maximum of 7 728 kWh/year.</p> <p>▪ Arbitrum One</p> <p>The IDOS token will reside in Arbitrum One, so the Association proceeds to estimate the energy usage of this blockchain platform.</p> <p>Node Counts and Roles</p> <p>**Arbitrum One Sequencer: 1 node**</p>
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		<p>Arbitrum One currently uses a single sequencer (run by Offchain Labs/the Arbitrum Foundation) to order and batch transactions (source)). This sequencer is essentially a centralized server responsible for all block production.</p> <p>**Arbitrum One Validators: 13 nodes**</p> <p>As of late 2024, Arbitrum One had an allowlist of 13 active validator nodes (source). These validators monitor the sequencer’s outputs and can challenge fraudulent transactions via fraud proofs.</p> <p>**Assumption**</p> <p>The Association will exclude any other passive “full nodes” run by users or RPC providers and focus only on the core infrastructure (the sequencer and the validator nodes) since they dominate the network’s energy usage.</p> <p>Hardware Specifications and Assumptions</p> <p>**Typical Validator Node Hardware**</p> <p>According to Arbitrum’s documentation, a full/validator node should have roughly a 4-core CPU and 16 GB RAM with SSD storage (source)). Such hardware, when running continuously, typically draws on the order of tens of watts of power. For our estimate, it is assumed ~50 W power draw per validator node on average (a conservative estimate accounting for CPU, memory, and disk usage 24/7).</p> <p>**Sequencer Node Hardware**</p> <p>The sequencer handles all Arbitrum One transactions (often multiple per second) and must operate with low latency. It is assumed that the sequencer runs on a high-performance server (e.g. a multi-core machine with 16+ cores and ample RAM) to handle peak throughput. Such a</p>
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		<p>server under continuous load might average around 100–150 W power draw. ~150 is used as a reasonable estimate for the sequencer’s power usage, given it is the busiest node (processing incoming transactions, compressing batches, and posting data to Ethereum L1). This accounts for periods of high activity where CPU and network usage are high.</p> <p>**Uptime**</p> <p>It is assumed that 24/7 operation (8760 hours/year) for all nodes (both validators and the sequencer). In reality, nodes may have occasional downtime for maintenance, but the network design expects them to run continuously for maximum security and availability.</p> <p>Energy Consumption Calculation (kWh/year)</p> <p>Using the above assumptions, the Association can calculate the annual electricity consumption of the Arbitrum One network by summing the contributions of all sequencer and validator nodes:</p> <ul style="list-style-type: none"> - Sequencer: 1 node × 150 W ≈ 150 W total. - Validators: 13 nodes × 50 W each ≈ 650 W total for all validators. <p>Total Power Draw: ~150 W + 650 W = 800 W for the whole Arbitrum One core network.</p> <p>Over a year, this means Arbitrum One’s core infrastructure is estimated to consume 7 008 kWh/year in electricity.</p>
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