

AKX Ecosystem: Protecting Online and Offline Properties with Post-Quantum Blockchain Security

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RISKS DISCLOSURE \_\_\_\_\_\_\_34

## **PREFACE**

As quantum computing continues to advance, it poses a growing threat to the security of blockchain technology. The use of classical cryptographic algorithms in blockchain technology could be easily compromised by quantum computers, making the blockchain vulnerable to attack. As a result, there is a need to develop new cryptographic algorithms that are resistant to quantum computing and can be used to secure the blockchain in a post-quantum world.

AKX Ecosystem aims to build a post-quantum blockchain architecture that is resistant to government control or manipulation, potentially eliminating censorship and enabling secure communication and data exchange.

However, this ambitious goal will start with integrating AKXID as an additional protection layer over existing mainstream blockchains. This approach will enable protection of existing assets and real-life items from theft while paving the way for a more secure, decentralized future.

Post-quantum cryptography is critical to ensuring data privacy and security on any online platform, and AKX Ecosystem's blockchain architecture provides users with confidence that their data and communications are secure and private. The long-term potential of this 2023 AKX3.com AKX Ecosystem all rights reserved – WHITE PAPER MARCH 2023

technology includes a data revolution as big as the internet, unlocking new opportunities for global innovation and collaboration.

AKX Ecosystem's approach represents a significant step forward in the evolution of the internet and its impact on society, not only ensuring the long-term security and resilience of blockchain, but also potentially eliminating censorship and empowering individuals and organizations around the world to share and exchange data freely.

# AKX Ecosystem: Protecting

# Online and Offline Properties

# with Post-Quantum Blockchain

# Security

The AKX Ecosystem is a blockchain-based solution that is designed to help protect online and offline properties from potential security threats, both in the present and in the future. It achieves this by leveraging post-quantum encryption techniques, which are resistant to attacks from quantum computers, and by adding an additional layer of security to existing blockchains.

By using post-quantum encryption, the AKX Ecosystem can ensure that any data transmitted over its network is secure and cannot be compromised by quantum computers, which are capable of breaking many of today's encryption methods. This is particularly important as

quantum computing technology becomes more advanced, as it could potentially render many of today's security measures obsolete.

In addition, the AKX Ecosystem adds an extra layer of security to existing blockchains, which can help to protect against attacks that target the underlying blockchain technology itself. This can be particularly important for businesses and organizations that rely on blockchain technology to store sensitive data, as any breach of the blockchain could result in significant financial or reputational damage.

Overall, the AKX Ecosystem offers a robust and innovative solution for protecting online and offline properties using post-quantum encryption and a new layer of security over existing blockchains.

#### THE PROBLEM

In today's world, online and offline properties are vulnerable to security threats, both now and in the future

Existing security measures may not be sufficient to protect against quantum computing attacks

#### **SOLUTION OVERVIEW**

The AKX Ecosystem leverages post-quantum encryption to ensure that any data transmitted over its network is secure

The AKX Ecosystem adds an additional layer of security to existing blockchains, protecting against attacks that target the blockchain technology itself

## AKX ID

The AKX ID and Authenticity Verification System is a versatile system that can be used for various purposes, including verifying the authenticity of luxury goods and NFTs. However, it is not limited to these use cases alone and can be extended to many other fields where verification of authenticity and ownership is critical.

The system uses post-quantum cryptography such as Falcon and Dilithium for the signature scheme and is at the heart of the AKX ecosystem. The AKX ID is a unique identifier that is generated for each luxury good or NFT and is associated with its ownership. This ID is used to verify the authenticity of the luxury good or NFT, and to ensure that the owner is authorized to sell or transfer ownership of the item.

For example, in the case of luxury goods, the system allows for the scanning of the item to generate its AKX ID, which is then used to authenticate the item and ensure its validity. Similarly, in the case of NFTs, the system allows for the verification of the authenticity of the NFT and the ownership of the owner by verifying their AKX ID.

The AKX ID and Authenticity Verification System provides a secure and reliable way to verify the authenticity and ownership of items in various fields, providing confidence to buyers and sellers alike.

#### DECENTRALIZATION OF AKX ID

The AKX ID system is designed to be decentralized, meaning that there is no central authority controlling it. Instead, the system relies on a network of nodes to maintain the system's integrity and security.

Nodes in the AKX ID network perform a variety of tasks, including generating and verifying AKX IDs, validating transactions, and ensuring that the system remains secure and resistant to attacks. These nodes work together in a peer-to-peer network, with each node communicating with a set of neighboring nodes to propagate information and maintain consensus.

By being decentralized, the AKX ID system is designed to be more resilient to attacks and more resistant to censorship or control by any single entity or group. This is important for ensuring the authenticity and integrity of luxury goods and other assets, as it makes it more difficult for bad actors to manipulate or counterfeit the system.

#### WHAT IT MEANS FOR THE FUTURE

The AKX ID system has the potential to revolutionize industries that rely on product authenticity and ownership verification. By providing a tamper-proof and decentralized method for authenticating products and verifying

ownership, it can help prevent the spread of counterfeit goods, protect intellectual property rights, and ensure that legitimate owners are able to control and transfer their assets securely.

In addition, AKX ID can also provide new opportunities for secure peer-topeer transactions, enabling individuals to easily buy, sell, and trade assets with confidence. This could have a significant impact on industries such as e-commerce, gaming, and collectibles, where ownership and authenticity are critical factors.

Overall, the AKX ID system represents a major step forward in the development of secure and decentralized identity and asset management solutions. By leveraging post-quantum cryptography and a decentralized network of nodes, it has the potential to change the way we think about ownership, authenticity, and trust in the digital age.

### **USE CASES**

#### USE CASE: "LUXURY PRODUCTS AUTHENTICATION"

The value of luxury goods is often determined by their authenticity, rarity, and exclusivity. If a luxury good cannot be authenticated, it loses its value because it is no longer considered authentic. This is particularly true for high-end luxury goods, which are often purchased as an investment or a status symbol.

If a luxury good is marked as invalid or not resalable due to the authentication process failing or a signature mismatch, the luxury goods brand would likely not accept the item for resale. The item would be deemed worthless and would not have any resale value.

This would discourage theft, as the incentive to steal the luxury goods for resale or to claim ownership of the stolen luxury goods would be reduced. If there is no market for the stolen luxury goods, then the motivation for theft is decreased. This would help to prevent the circulation of stolen or

counterfeit luxury goods in the market, ultimately protecting the interests of the luxury goods brand and the consumers.

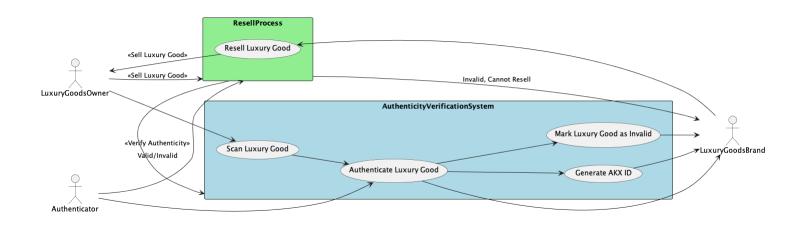
#### DIAGRAM: "LUXURY PRODUCTS AUTHENTICATION"

The use case diagram shows a system for verifying the authenticity of luxury goods, and a resell process. There are three main actors: the Luxury Goods Owner, the Authenticator, and the Luxury Goods Brand.

The Authenticity Verification System consists of four use cases: Scan Luxury Good, Authenticate Luxury Good, Generate AKX ID, and Mark Luxury Good as Invalid. The Luxury Goods Owner initiates the process by scanning the luxury good, and then the Authenticator authenticates it. If the luxury good is authentic, an AKX ID is generated and associated with it. If it is not authentic, the luxury good is marked as invalid.

The Resell Process consists of one-use case: Resell Luxury Good. The Luxury Goods Brand is responsible for this process, and the Luxury Goods Owner can sell the luxury good to another party. Before the resell can happen, the authenticity of the luxury good must be verified by the Authenticity Verification System.

The diagram is color-coded based on the system each component belongs to: the Authenticity Verification System is blue, the Resell Process is green, and the actors are orange. The actions in the diagram are emphasized with a bold font.



#### USE CASE: NFT MARKETPLACE / NFT AUTHENTICITY

The use case describes a system for verifying the authenticity of NFTs and ensuring that only legitimate NFTs are sold on a marketplace. The system involves an NFT Owner who wishes to sell an NFT on a Marketplace. The Marketplace is responsible for verifying the authenticity of the NFT and the identity of the owner.

The Authenticity Verification System is in place to ensure the legitimacy of the NFT. The system checks the authenticity of the NFT and generates an AKX ID for the NFT. The AKX ID is a unique identifier that is assigned to the 2023 AKX3.com AKX Ecosystem all rights reserved – WHITE PAPER MARCH 2023

NFT and is used to verify ownership. The system also verifies the owner's AKX ID to ensure that only legitimate owners are allowed to sell the NFT.

If the NFT is deemed to be legitimate and the owner is verified, the NFT is allowed to be resold on the Marketplace. However, if the NFT is not legitimate or the owner is not verified, the NFT cannot be sold on the Marketplace.

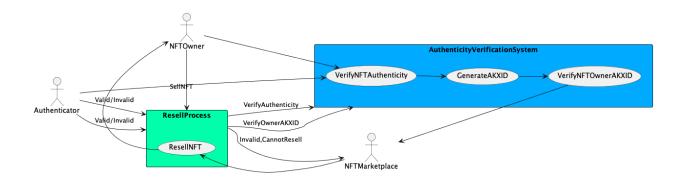
Overall, the use case is designed to ensure the authenticity of NFTs and protect buyers from fraudulent sales. It also helps to maintain the reputation of the Marketplace as a legitimate and trustworthy platform for buying and selling NFTs.

#### DIAGRAM: NFT AUTHENTICITY

This diagram represents the use case for verifying the authenticity of an NFT (non-fungible token) before it can be resold on an NFT marketplace. The process involves the NFT owner, an Authenticator, and the NFT Marketplace.

The first step is for the NFT Owner to initiate the verification process by requesting authentication of the NFT's authenticity. The Authenticator checks the NFT's authenticity and generates an AKX ID (a unique identifier).

Next, the authenticity of the NFT owner is verified by checking their AKX ID. If the NFT and NFT Owner are verified, the NFT can be resold on the NFT Marketplace. If either the NFT or the NFT Owner is invalid, the NFT cannot be resold on the marketplace.



## IMPLEMENTING AKX ID

AKX ID will be initially supporting EVM-based blockchains like Ethereum, Binance Smart Chain, and Polygon. This means that it will utilize these blockchains' underlying technology and infrastructure to implement its authenticity verification and AKX ID generation process.

However, AKX ID aims to expand beyond just EVM-based blockchains and create its own secure layer over existing blockchains, both EVM and non-EVM-based. This will allow AKX ID to operate independently of any specific blockchain and offer its authenticity verification and AKX ID generation services across multiple blockchain networks.

Creating a secure layer over existing blockchains will involve building bridges and implementing interoperability protocols that allow different blockchains to communicate with each other seamlessly. This will create a decentralized network of nodes that work together to verify the authenticity of luxury goods, NFTs, and other assets, without relying on any central authority.

In summary, AKX ID's plan to expand beyond EVM-based blockchains and create its own secure layer over existing blockchains will enable it to offer

its services across multiple blockchain networks, creating a decentralized network of nodes that work together to verify the authenticity of assets.

#### OPEN-SOURCE PHILOSOPHY & PLAN

AKX ID will be built as an open-source system, meaning that its code will be publicly available for anyone to access, use, and contribute to. We believe that this is important because it will allow developers, researchers, and other experts in the field to work together and create a more robust and secure system. We will also provide easy-to-use tools and documentation to make it easier for people to contribute to AKX ID.

We don't want AKX ID to be only a proprietary system because we believe that the future of digital identity verification should be open and collaborative. By making AKX ID open-source, we can encourage innovation and experimentation while also building a more secure and trustworthy system. Our philosophy is to work with our competitors and others in the industry to enhance the digital identity verification ecosystem as a whole, rather than competing against each other.

In addition to allowing contributions from the community, we will also provide incentives for developers and contributors to participate in the AKX ID ecosystem. This could include bounties for specific tasks or 2023 AKX3.com AKX Ecosystem all rights reserved – WHITE PAPER MARCH 2023

features, recognition for contributions, and access to exclusive resources and tools.

Overall, we believe that by building AKX ID as an open-source system and encouraging community contributions, we can create a more secure, trustworthy, and innovative digital identity verification solution that benefits everyone involved.

# BUSINESS MODEL, MARKET AND COMPETITION

AKX ID is a revolutionary system that leverages post-quantum cryptography to provide secure and decentralized digital identity verification. It has the potential to transform the luxury goods industry, the NFT market, and many other use cases, with the ability to verify the authenticity of digital assets and establish trust between buyers and sellers.

Our business model is designed to create a sustainable revenue stream while providing affordable and flexible pricing plans. We offer free sponsored plans for small businesses and individuals to encourage adoption and growth. For larger enterprises, we offer customized solutions tailored to their specific needs, with competitive pricing based on the number of verifications performed.

We believe in collaborating with competitors to enhance the industry as a whole and not fight against them. We are committed to delivering high-quality solutions that exceed our customers' expectations. Our team has

extensive experience in cryptography, blockchain technology, and business development, and we are well-equipped to capture a significant portion of the growing digital identity market.

According to a recent report, the global digital identity market is projected to reach \$33.7 billion by 2026, with a compound annual growth rate of 16.2%. The market is driven by the increasing demand for secure and reliable digital identity verification solutions across various industries. AKX ID is well-positioned to capture a significant portion of this growing market with its unique features and advantages.

In addition to the verification service, AKX will also have its own secure DEX, where users can trade cryptocurrencies and digital assets with low transaction fees. These fees will then be redistributed to all holders of the AKX ERC20 token as rewards, creating a vibrant ecosystem that benefits all stakeholders.

As we expand our services, we plan to create our own secure layer over existing blockchains, including EVM-based and non-EVM-based chains, to provide even greater security and scalability. This will enable us to create a robust ecosystem that benefits both individuals and enterprises alike.

In summary, AKX ID offers a unique and innovative solution to the growing need for secure and reliable digital identity verification. Our business model is designed to be sustainable and flexible, with free sponsored plans for individuals and affordable customized plans for enterprises. We believe in collaborating with competitors to enhance the industry as a whole, and we are committed to delivering high-quality solutions that exceed our customers' expectations.

## **AKX FOUNDERS**

#### NICOLAS S. CLOUTIER - CEO & CO-FOUNDER

Nicolas S. Cloutier is the founder and CEO of AKX Ecosystem. He has been a part of the blockchain industry since 2013 and has been involved in several blockchain projects using Ethereum and Quorum. Nicolas started programming at the young age of 12 and is now 44 years old. He holds a B.Sc. in Administration with a concentration in Management from Athabasca University.

Prior to his work in the blockchain industry, Nicolas was a serial entrepreneur and founded Simusoft3D in 2000. Under his leadership, the company became one of the top mobile platform video game sellers and was featured in magazines such as Caribbean Business 2.0, in a Microsoft press conference, and in Electronic Gaming Monthly. He was also involved in internet security as a white hat hacker, helping e-commerce websites prevent being hacked, and managed security for top e-commerce websites generating millions of dollars each year.

One of Nicolas' goals is to make the world more united through decentralized technology and to improve human rights in countries that do not respect them. He is committed to providing ways to make information available in those countries safely for everyone. Nicolas was also a strong member of the Dogecoin community before taking the reins of AKX.

#### JEAN-FRANCOIS LABROSSE - CMO & CO-FOUNDER

Jean–Francois Labrosse has always been a fervent advocate of blockchain technologies and is one of the co-founders of AKX Ecosystem. He is the founder of JFL Media Training and <a href="www.jfl-media.com">www.jfl-media.com</a>, a media training and production company based in Montreal, Canada. He has been providing media training and video production services to clients from around the world for over 15 years.

Labrosse began his career as an entrepreneur at a young age, starting his first business at the age of 22. After completing a degree in Interactive Media Communication from UQAM, he moved to Paris to pursue a career in international marketing and communications. It was during this time that he developed his passion for media and communication training.

In 2001, Labrosse returned to Montreal to launch JFL Media Training and <a href="https://www.jfl-media.com">www.jfl-media.com</a> with the goal of helping organizations become better communicators through media training and video production services. Since then, Labrosse has built a team of experienced professionals who specialize in creating effective videos that help clients communicate more effectively with their target audiences.

Labrosse's commitment to innovation has earned him numerous awards throughout his career including the "Best Video Production Company" award from several Canadian associations which recognize excellence in business communication strategies and video production services.

Labrosse is also an active member of various media associations such as the Interactive Advertising Bureau and the Canadian Association of Marketing Professionals.

## AKX PRESALE

AKX ID is pleased to announce our upcoming presale of the AKX ERC-20 token, which will power our revolutionary digital identity verification system. The presale will offer a total of 25,600,000 AKX tokens, or 10% of the total supply, at a starting price of 0.01 Matic (or equivalent in USD) per token. The price will be determined by a random inflation algorithm that varies based on the number of tokens sold.

After the presale, AKX will be listed on several decentralized exchanges, including Uniswap, Sushiswap, and Quickswap, among others. This will enable AKX holders to easily buy and sell tokens, providing liquidity and driving demand for the token.

One of the key advantages of participating in the AKX presale is the opportunity to purchase tokens at a discounted price before they are listed on exchanges. Additionally, the presale is designed to ensure fairness and transparency, with all presale AKX tokens locked until the presale is completed. This ensures that participants cannot sell their tokens before the end of the presale, and that all tokens are sold to the community on a first-come, first-served basis.

We believe that AKX ID has the potential to revolutionize digital identity verification and establish a new standard for trust and security in the blockchain industry. By participating in our presale, you can help us achieve our vision and benefit from the potential growth of the AKX ecosystem.

#### HOW WE PROTECT INVESTORS

AKX ERC20 token has a lock-up period for founders and team members to prevent any potential market manipulation. The vesting schedule ensures that tokens are gradually released over time, and the team is incentivized to work towards the long-term success of the project.

Furthermore, the transaction fees generated by the AKX DEX are redistributed to all holders of the AKX ERC20 token as rewards, creating a vibrant ecosystem that benefits all stakeholders. This provides an additional incentive for users to hold onto their tokens and participate in the AKX ID network. Overall, AKX ID is designed to promote transparency, security, and trust in the digital asset market, reducing the risk of fraud and rug pulls.

#### WHERE ARE FUNDS STORED

AKX ID will initially hold the liquidity in a treasury contract, which will be secured by the team's multi-signature wallet. This means that any changes to the treasury contract will require the approval of multiple team members, ensuring transparency and security.

Once the token is listed on the DEX, the liquidity will be transferred to a Gnosis multi-signature wallet, which provides additional security and control over the funds. This approach helps to mitigate the risk of rug pulls or other malicious actions by ensuring that funds are managed and transferred in a responsible and transparent manner.

The advantage of this approach is that it provides an additional layer of security and accountability for investors, who can be confident that their funds are being managed responsibly and that any changes to the liquidity or other aspects of the project are subject to careful review and oversight. Additionally, the use of a multi-signature wallet helps to prevent any single point of failure in the management of funds, reducing the risk of fraud or theft.

#### **VESTING SCHEDULE**

AKX ERC20 token will be subject to a vesting schedule to ensure that the token distribution is gradual and orderly. This means that the tokens will not be fully available to the founders and initial investors all at once, but will be gradually unlocked over a specified period of time.

The vesting schedule for AKX ERC20 token will be set up as follows:

Founders and initial investors: 4% of their total allocation will be available immediately upon token release. The remaining 96% will be vested over a period of 24 months, with 25% unlocked every 6 months.

Advisors and partners: 25% of their total allocation will be available immediately upon token release. The remaining 75% will be vested over a period of 12 months, with 25% unlocked every 4 months.

Team and employees: 50% of their total allocation will be available immediately upon token release. The remaining 50% will be vested over a period of 12 months, with 12.5% unlocked every 3 months.

This vesting schedule ensures that the token distribution is gradual and orderly, allowing the AKX team to maintain a long-term view of the project's development and success. It also ensures that the team and 2023 AKX3.com AKX Ecosystem all rights reserved – WHITE PAPER MARCH 2023

initial investors have a strong incentive to contribute to the project's growth over the long term.

It's important to note that this vesting schedule is subject to change based on the AKX team's discretion and the needs of the project. Any changes to the vesting schedule will be communicated transparently to the community.

# **TOKENOMICS**

Name	AKX ERC20 Token
Token network	Polygon (formerly Matic Network)
Token type	ERC20
Total supply	256,000,000 AKX
Presale supply	25,600,000 AKX
Price per AKX	Starting at 0.01 MATIC (or equivalent in USD)
Vesting schedule	Founders: 4% each, vesting over 2 years
Token distribution	Presale: 10% Evidential Presale: 10% Liquidity pool: 30% Team: 12% Advisory board: 5% Strategic partnerships: 10% Ecosystem development: 10% Reserve fund: 5% Public sale: 18%
Liquidity strategy	Initially held in a treasury contract, then transferred to a Gnosis Multisignature Wallet with a 24-hour delay for security

Token utility	Used as a means of payment for AKX ID verification services br> Used as a governance token for voting on AKX ID platform updates and proposals
Token burning	A percentage of transaction fees will be burned to decrease the overall supply of AKX and increase its scarcity
Token buyback	A portion of the reserve fund will be allocated to buyback AKX tokens from the market to increase their value

The vesting schedule for the founders is set at 4% each, with a total vesting period of 2 years. This means that each founder will receive 1% of their total allocation each quarter over the course of 2 years.

By initially holding the liquidity in a treasury contract and then transferring it to a Gnosis Multisignature Wallet with a 24-hour delay, AKX ID aims to minimize the risk of fraud and rug pulls. This delay allows for time to verify the transaction and prevent any unauthorized access.

The AKX ERC20 token will be used as a means of payment for AKX ID verification services, as well as a governance token for voting on AKX ID platform updates and proposals. A percentage of transaction fees will be burned to decrease the overall supply of AKX and increase its scarcity, while a portion of the reserve fund will be allocated to buyback AKX tokens from the market to increase their value.

## RISKS DISCLOSURE

Some potential risks associated with investing in AKX ID:

Market risk: The market price of AKX ID tokens may be highly volatile and may fluctuate widely due to various factors, including market demand, regulatory changes, and general market conditions.

Regulatory risk: The regulatory environment for blockchain-based technologies and cryptocurrencies is rapidly evolving and may change in ways that could negatively impact the adoption and value of AKX ID tokens.

Technology risk: AKX ID is a new and untested technology that is subject to various risks and uncertainties, including the risk of security breaches, technical failures, and software bugs that could negatively impact its functionality and value.

Liquidity risk: AKX ID tokens may have limited liquidity on cryptocurrency exchanges, which could make it difficult to sell them at market prices or to realize their full value.

Financial risk: AKX ID is a startup company and is subject to various financial risks and uncertainties, including the risk of insufficient funding, cash flow problems, and operational expenses that could negatively impact its ability to execute its business plan and deliver value to its stakeholders.

It is important to carefully consider these risks before investing in AKX ID or any other cryptocurrency or blockchain-based project. It is recommended to conduct your own research and consult with a financial advisor before making any investment decisions.