Lightspeed Ecosystem of

Web3 Payments & Gaming Solutions

NORDEK

WHITE PAPER

POWERED BY
NORDEK Blockchain
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Abstract

Blockchain ecosystem for mainstream adoption of web3 payments.

NORDEK strives to be the most business and consumer-friendly blockchain ecosystem for the mainstream adoption of web3 payments. That is the reason why the NORDEK team decided to develop a DPOS blockchain on their own. Nordek is powered by fast and low-cost EVMcompatible Network blockchain. The team put together their talents to create NORDEK Smart Chain, a blockchain devoted first and foremost to creating a foundation for crypto games. While NORDEK features a Turing-complete development environment for solidity developers, the focus is on the gaming industry. NORDEK features built-in templates for NFT issuance, tokenomics design and metaverse components.

NORDEK is designing its decentralized node network to further align the needs of gamers and game developers, incentivizing the game developers and gamers to become nodes and validators. Rather than creating separate communities with different interests, the NORDEK network merges the two, providing the community an additional way to earn income and become the true owners of the network itself.
Background

Market

The cryptocurrency market was evaluated at around €77.28 ($91) billion for 2020. As of 2021, Triple A estimated global crypto ownership rates at an average of 3.9%, with over 300 million crypto users worldwide and over 18,000 businesses are already accepting cryptocurrency payments.

In 2019, the Europe Cryptocurrency Exchanges market size was €4.38 ($5.16) billion, and it is expected to reach €12.96 ($15.26) billion by the end of 2026, with a CAGR of 16.94% during 2020-2026. Global Blockchain Market The worldwide spending on blockchain solutions in 2021 is €5.60 ($6.6) billion and will reach almost €16.13 ($19) billion by 2024.

Global Blockchain Market

The global blockchain market would reach €48.15 ($56.7) billion by 2026 from €5.10 ($6.0) billion in 2021, at a CAGR of 56.9% forecast from 2021 to 2026. The number of B2B cross-border transactions finalized on blockchain worldwide is expected to increase dramatically over the following years. By 2025, the number of B2B cross-border transactions on the blockchain will reach 745 million.
Challenges

The global financial system falls short in providing fast, frictionless payments and attractive financial services, especially in developing countries. Limited access to basic banking services and unstable fiat currencies hinder opportunities.

However, widespread mobile phone adoption, even in impoverished nations, presents a significant opportunity. The emergence of blockchain technology and cryptocurrencies allows for permissionless transactions with stable currencies.

While alternatives like Binance Smart Chain (BSC) and Solana have faced performance issues, the best option for addressing these challenges is to explore innovative blockchain solutions that prioritize scalability, security, and low transaction fees.
Opportunities

Numerous new projects are seeking suitable Layer-1 blockchains for game and metaverse development. While generalized Layer-1 blockchains are an option, a customized approach holds potential for improved functionality, faster throughput, and tailored features specific to the gaming market.

Ethereum Virtual Machine

Interoperability is increasingly necessary for Layer-1 solutions, and leveraging an EVM (Ethereum Virtual Machine) environment offers a straightforward means of achieving it. By using EVM-compatible blockchains, developers can run their code on different systems, reducing development risks.

While newer blockchains promise enhanced throughput and lower fees, none are designed explicitly for crypto gaming, creating a market opportunity for Layer-2 solutions that cater to this demand.
Solution

NORDEK Blockchain (NRK) is a Dpos Blockchain designed specifically for payment solutions, with a focus on payments, gaming, and metaverse modules. While it utilizes Solidity for a Turing-complete development environment, its primary emphasis is on providing easy-to-use features for fintech, games, and metaverse projects. The NORDEK team is also launching their own game on the platform, serving as both a proof of concept and a template for other developers to create their own games using the open-source modules provided by NORDEK.

NORDEK chain primary features include:

- Fast throughput and low fees to support gaming
- EVM compatibility, Solidity development environment
- NFT development and built-in templates
- Partnerships with worldwide developers focused on node network
- Blockchain funding ecosystems
- Game deployment modules for sharing of game templates
- Interoperability
- Model for B2B Business
- Solutions and support hub for game deployment
Alongside the NORDEK Blockchain, a specialized Layer 2 solution is introduced to promote web3 payment adoption. The NORDEKverse, a free-form NFT game area, allows users to own land and build within the metaverse. As the initial game on the platform, it serves as a testing ground for the development of generic metaverse tools and showcases NORDEK's continuous innovation.

**Fast throughput and low fees to support Web3 Developments**

The most important feature of the NORDEK Blockchain is the extremely efficient infrastructure, which provides low transaction fees and fast throughput. To provide a real-time game experience, it’s essential to have a blockchain infrastructure with instant transactions and low fees.

**0 Gas Fee Protocol**

For developers and Early Adopters, this is a game-changer. The 0 Gas fee Module till 2M Transactions unlocks easier go-to-market opportunities, and higher adoption rates, and allows for free transactions for end-users.
EVM compatibility, Solidity development environment

NORDEK Chain is a blockchain compatible with the Ethereum Virtual Machine (EVM), utilizing the Solidity development environment. This compatibility enables projects that have been developed on EVM environments and are dissatisfied with slow transaction speeds and high fees to seamlessly migrate their code to NRK. This positions NRK as a favorable choice among other blockchains targeting the gaming market.

NFT development and built-in solution for Marketplace

To speed up the development time for blockchain-based games in the NORDEK environment, the solution includes modules for NFT development. NFT creation and management are easy on the NRK. The NORDEK team also makes available built-in templates for some of the most common types of NFT implementations for games, such as playing cards, clothing, and land. These ready-made NFT templates allow game developers to quickly spin up new games and experiences.
Partnership with global developers for web3 payments -focused node network

NORDEK aims to foster a collaborative community of game developers, players, validators, and nodes to collectively sustain the network. Developers are encouraged to serve as nodes and validators, ensuring the network's stability while also generating additional income. This community-driven approach tailored to the needs of web3 adopters enables game developers to maintain the necessary infrastructure and actively participate in NORDEK’s blockchain ecosystem.

Game deployment Infrastructure

NORDEK is spearheading the creation of the inaugural game on the NORDEK Chain, serving as both a proof of concept and a foundation for future developments. Through the release of starter packs comprising modules from their own game, NORDEK empowers game developers to build their own projects while fostering collaboration. The platform encourages developers to share their modules on a marketplace, enabling faster development through standardized protocols. This marketplace benefits developers by providing income opportunities through smart contracts and add-ins. The ability to borrow or rent modules further enhances the ecosystem, while shared technology accelerates time to market for all games on the NORDEK network.
In-game token release module

NORDEK provides game developers with a diverse selection of pre-programmed tokenomics models for launching in-game tokens and cryptocurrencies. By utilizing the token release module, projects can efficiently develop their tokenomics and gain insights from successful models, reducing development time and consulting expenses. The NORDEK ecosystem fosters collaboration among games, allowing them to share knowledge and information on tokenomics models. Furthermore, the module enables developers to easily create tokens and facilitates their issuance on both decentralized and centralized exchanges.
The NORDEK team will encourage and develop a game funding ecosystem, including launchpads and investors interested specifically in games and metaverses. As a top platform for crypto project development, the NORDEK ecosystem will naturally attract resources, talent, and investors who gravitate towards the Nordek environment. NORDEK will actively partner with launchpads and provide resources that help games and metaverses prepare for fundraising.
Solutions and support hub for NFT & game deployment

NORDEK is committed to developing a comprehensive support ecosystem for game development, fostering a collaborative community. This support hub will serve as a knowledge repository, providing developers with access to valuable resources, including knowledge bases and support forums where they can exchange experiences and share best practices. To encourage community engagement, the support hub will incorporate various reward systems that recognize contributions made by members.

The NORDEK core team will actively participate in offering technical support to game developers, assisting them in leveraging NORDEK for their blockchain needs. The hub will also offer educational tracks and technical documentation, facilitating community growth and ensuring the seamless launch of games on the NORDEK platform.

Additionally, the support hub serves as a vital feedback channel for the NORDEK team, enabling them to gather insights on user experience and desired platform features.
The NORDEK Metaverse Platform

The NORDEK Metaverse empowers players to unleash their creativity by designing characters, games, quests, and in-game businesses. Avatars can be fully customized, allowing for personalized appearances, weaponry, vehicles, and accessories.

The NORDEKverse features Lands, Game Maker, and a Market Place where LAND NFTs serve as the foundation. Players can develop their lands, collaborate with others, undertake quests, and generate income. Special powers, skins, weapons, and potions provide avatars with unique abilities. Residents can establish businesses, selling their creations or hosting events.
The NORDEK Blockchain

NORDEK acts as a decentralized and EVM-compatible public blockchain, driving the Nordek platform and ecosystem. It seamlessly supports Ethereum smart contracts. Consensus on NORDEK is achieved through a variant of delegated Proof of Stake (DPoS), with numerous independent validators and the Nordek Foundation’s involvement. Validators contribute to network governance through NRK Improvement Proposals (NIPs). Developers can deploy their smart contracts and integrate them into games, harnessing the capabilities of NORDEK’s blockchain.

Proof of Stake Consensus

NORDEK BlockChain (NRK) is a Proof-of-Stake blockchain that is designed for low energy consumption and the reduction of the cost of creating blockchain consensus. The NRK uses a consensus mechanism based on concepts outlined in the Honey Badger Byzantine Fault Tolerant HBBFT mechanism, where a random group of validator nodes is elected in each consensus cycle in order to validate the blocks.
The NORDEK development team has used the following configuration parameters on top of the BFT algorithm to govern the blockchain consensus mechanism:

- **CYCLE_DURATION_BLOCKS**
  - 48 hours \([48 \times 60 \times 60 / 5]/\)
  - Number of blocks per cycle

- **DEFAULT_VALIDATOR_FEE**
  - 15% The validator must stake himself the minimum stake

- **BLOCK_REWARD_AMOUNT**
  - \((\text{Total Supply} \times \text{Inflation}/100) / \text{Blocks Per Year in which inflation} = \text{APY, usually at 1%}\)

### Delegation through Staking with Validators

In the NRK Network, validators can increase their consensus stake by attracting funds from delegators who do not operate validator nodes. Delegators have the flexibility to choose their preferred validator(s) and stake FUSE through the NORDEK Staking Platform. Delegators receive a share of NRK block rewards proportional to their stake, minus the fee paid to their chosen validator. The minimum fee, currently set at 15%, helps mitigate the risk of validator consolidation by providing low delegation fees.
NRK Network Consensus

In order to participate in securing the network consensus, a node operator must stake a minimum required amount of NRK Tokens (currently set at 100,000 NRK). Becoming a validator on NRK is permissionless, meaning that a node operator just needs to satisfy certain technical requirements.

The need to stake NRK ensures that an entity cannot create multiple seemingly distinct validators without incurring a significant cost. Hence, Sybil’s protection. Currently, the maximum number of validators on NORDEK (NRK) Network is 100.

The validator who publishes a block agreed upon during a given consensus round is rewarded by the network protocol in newly minted NRK tokens. They also receive the fees users paid for the transactions included in the block. Over time, validators can expect to publish a share of blocks equal to their share of the overall stake. Since NRK uses dPoS, a validator can increase their share by attracting NRK tokens from delegators.
Delegated Proof of Stake (DPoS)

Block

← Validators →

Witness Node

← Votes →
Benefits

- Low-cost, high-throughput blockchain
- The First blockchain, focusing on the needs of web3 adoption developers
- Built-in NFT building capabilities
- Token issuance, tokenomics examples and modules
- Game modules such as land and playing cards
- Support for game developers
- Project development funding ecosystem
- Participatory decentralized node network
Business

Revenue Model

NORDEK revenues come from a number of sources:

- Marketplace
- Maintenance of the Network, Validation Nodes
- Listing and Token Sale Fees
- Financial transactions
Tokenomics

- Private Round: 11.50%
- Treasury: 15%
- Development & Marketing: 15%
- Early Adopters: 30%
- Game, Staking Rewards & Airdrops: 30%
- Sustainability: 2%
- Team: 15%
- Advisors: 5%
- Liquidity: 1%
Roadmap

Q4-2022
- NRK Testnet Internal Testing
- NORDEK New Branded Corporate Website Launch NORDEK 2022
- Whitepaper Release

Q1-2023
- GameHub Launch Supporting All GameFi Projects on NORDEK Blockchain
- NORDEK Academy

Q2-2023
- Launch of Norpay Crypto Payments Card – Virtual and Physical
- Multiple CEX listing
- Project launches on Launchpad

Q3-2023
- NRK Bridge and Multiple Dx Listing
- POS Staking/Swap Tier 2
- Centralized Exchange (CEX) Listing

Q2-2024
- Metaverse Solution V.2
  Global Collaboration for Rare NFT Marketplace (iOS & Android) BSC NFT Blindbox &

Q3-2024
- NORDEK Crypto Neo Banking Solution

Q4-2024
- NORDEK Crypto Neo Banking Solution

Q1-2024
- POS machine,
  Hardware Wallet
Nordek Green

At NORDEK, we recognize the importance of sustainable development and the role businesses play in addressing pressing environmental and social issues. As part of our commitment to a greener future, we are proud to announce the addition of a Sustainability Fund - NORDEK GREEN - to our tokenomics. This fund, dedicated to Corporate Social Responsibility (CSR) initiatives, aims to create a lasting impact on the environment and society, contributing to a better future by 2030.

Through our Sustainability Fund - 1, NORDEK will actively participate in the global effort to combat climate change and promote sustainable living. By allocating a percentage of our token's supply to the Sustainability Fund, we are investing in projects and initiatives that foster environmental conservation, social equity, and economic prosperity.
**Nordek Green**

**Renewable Energy:**
We believe in the power of clean, renewable energy sources such as solar, wind, and hydroelectric power. Our Sustainability Fund will invest in projects that promote the development and adoption of these technologies, reducing our reliance on fossil fuels and contributing to a greener, more sustainable energy landscape.

**Reforestation and Biodiversity:**
Forests are vital ecosystems that play a critical role in carbon sequestration, preserving biodiversity, and supporting countless communities worldwide. Our Sustainability Fund will support reforestation efforts, afforestation projects, and the protection of endangered species, ensuring the health and longevity of these precious ecosystems.

**Waste Management and Recycling:**
As the global population grows, so does the amount of waste generated. We are committed to supporting innovative waste management and recycling solutions, transforming waste into valuable resources and reducing the burden on landfills and the environment.
**Education and Community Development:**
Sustainable development cannot be achieved without empowering communities and individuals with the knowledge and resources to make a difference. Our Sustainability Fund will invest in educational programs, job training, and capacity-building initiatives that promote environmental awareness, social equity, and economic development.

**Carbon Credits Incentives For Projects:**

- **Reward System:**
  We will develop a reward system that encourages network participants to adopt energy-efficient hardware, utilize renewable energy sources, and implement other green practices. Participants that demonstrate a lower carbon footprint or contribute to carbon offset projects will receive additional rewards, such as reduced transaction fees, higher staking rewards, or special access to platform features.

- **Collaboration with Environmental Projects:**
  Our Sustainability Fund will actively invest in and partner with environmental projects that generate carbon credits. By supporting projects that focus on reforestation, renewable energy, and other climate change mitigation strategies, we can amplify our positive impact on the environment while creating a valuable supply of carbon credits for our marketplace.
Disclaimer

In consideration of NORDEK (the “Company”) providing this Whitepaper to the recipient, the recipient acknowledges that the contents of this Whitepaper are confidential to the Company and the recipient agrees not to disclose, distribute or permit to be communicated verbally, directly or indirectly or otherwise, or to otherwise publish the contents of this Whitepaper except with the prior written consent of the Company. For the purposes of this acknowledgement “recipient” includes, without limitation, any principal, employee or agent of the recipient.

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This Whitepaper does not purport to contain all the information that a prospective participant may require. In all cases, interested parties should conduct their own investigation and analysis of the Company and the data contained in this Whitepaper.

The Company does not make any representation or warranty as to the accuracy or completeness of the information contained in this Whitepaper. Furthermore, the Company shall not have any liability to the recipient or any person resulting from the reliance upon this Whitepaper in determining to make an application to apply for shares in the Company.
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The Company makes no representation about the underlying value of the tokens on offer. Prospective participants must make their own assessment about whether the price of the tokens being offered represents fair value.

**Participant Warning**

Participation in a token sale carries high risks. It is highly speculative and before participating in any project about which information is given, prospective participants are strongly advised to seek appropriate professional advice. The information contained in this Whitepaper has been prepared by or on behalf of the Company. NORDEK has not undertaken an independent review of the information contained in this Whitepaper.

**Prominent Statements**

The information contained in this Whitepaper about the proposed business opportunity is not intended to be the only information on which a decision is to be made and is not a substitute for a disclosure document, or any other notice that may be required under law. Detailed information may be needed to make a token participation decision. Prospective participants should be aware that no established market exists for the trading of any tokens that may be offered.
Future Statements

Participation in a token sale carries high risks. It is highly speculative and before participating in any project about which information is given, prospective participants are strongly advised to seek appropriate professional advice. The information contained in this Whitepaper has been prepared by or on behalf of the Company. NORDEK has not undertaken an independent review of the information contained in this Whitepaper.

Prominent Statements

Except for historical information, there may be matters in this Whitepaper that are forward-looking statements. Such statements are only predictions and are subject to inherent risks and uncertainty. Forward-looking statements, which are based on assumptions and estimates and describe the Company’s future plans, strategies, and expectations are generally identifiable by the use of the words ‘anticipate’, ‘will’, ‘believe’, ‘estimate’, ‘plan’, ‘expect’, ‘intend’, ‘seek’, or similar expressions. Participants are cautioned not to place undue reliance on forward-looking statements. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties both general and specific that contribute to the possibility those predictions, forecasts, projections and other forward-looking statements will not occur. Those risks and uncertainties include factors and risks specific to the industry in which the Company operates as well as general economic conditions. Actual performance or events may be materially different from those expressed or implied in those statements.
Value Risks

Tokens issued by NORDEK may drop substantially in value, or may remain illiquid for long periods of time or indefinitely. NORDEK cannot guarantee an active secondary market for the exchange of tokens purchased in the token sale. Not all disclosures or statements are being made in this disclaimer section. Participants should review the token sale agreement in its entirety and seek the professional advice of legal counsel and investment professionals.

NORDEK tokens may change in value based on a number of factors that are outside our control. There is no guarantee or expectation that NORDEK tokens will increase in value, provide a return, or have sufficient adoption and liquidity on exchanges. Owning these tokens does not constitute a share of equity or ownership in the company. The token economy is new and exciting. Regulatory circumstances may require that token mechanics be changed or altered.

NORDEK tokens do not have any rights, uses, purpose, attributes, functionalities or features, express or implied, including, without limitation, any uses, purpose, attributes, functionalities or features on the NORDEK platform. Company does not guarantee and is not representing in any way to buyer that the NORDEK tokens have any rights, uses, purpose, attributes, functionalities or features. NORDEK tokens may have no value. The company reserves the right to refuse or cancel NORDEK token purchase requests at any time at its sole discretion.