

HYPERX



WHITEPAPER

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TOKEN DISCLAIMER



THE PURPOSE OF THE WHITE PAPER IS INTRODUCTION OF HYPER X PROJECT TO POTENTIAL TOKEN HOLDERS IN VIEW OF UPCOMING TOKEN SALE. INFORMATION PROPOSED BELOW DOES NOT CONSTITUTE A PUBLIC OFFER. ITS ONLY PURPOSE IS TO PROVIDE RELEVANT AND SUFFICIENT INFORMATION TO POTENTIAL TOKEN HOLDERS. NOTHING IN THIS DOCUMENT MUST BE REGARDED AS ADVERTISING OF THE PRODUCT OR AN INVESTMENT OFFER. NOTHING IN THE DOCUMENT MUST BE REGARDED AS A SOLICITATION AND / OR PROPOSAL TO BUY ANY SECURITIES. THIS DOCUMENT DOES NOT FOLLOW ANY LAWS OR RIGHTS CONCERNING INVESTOR PROTECTION IN ANY JURISDICTION. SOME STATEMENTS, EVALUATIONS, AND FINANCIAL INFORMATION IN THE DOCUMENT ARE JUDGMENTS OF ITS AUTHORS. SUGGESTED JUDGMENTS OR INFORMATION MAY CONTAIN KNOWN AND UNKNOWN RISKS OR INACCURACIES, WHICH MAY LEAD TO EVENTS OR OUTCOMES WITH ECONOMIC EFFECTS. HYPER X SERVICE CANNOT BE USED TO ACQUIRE FOREIGN ASSETS AND / OR TO AVOID CONSEQUENCES OF UNLAWFUL ACTIONS WHICH ARE SUBJECT TO SUPERVISION BY FINANCIAL REGULATORS. THE 'INVESTMENT' TERM IN THIS DOCUMENT SHOULD BE UNDERSTOOD AS ACQUISITION OF TOKEN OR CRYPTOCURRENCY OFFERED IN TGE (TOKEN GENERATION EVENT). THE 'INVESTOR' TERM SHOULD BE UNDERSTOOD AS A REAL OR POTENTIAL HOLDER OF A TOKEN OR CRYPTOCURRENCY. IF YOU ARE A CITIZEN OR RESIDENT (TAX OR OTHER) OF THE PEOPLE'S REPUBLIC OF CHINA OR THE UNITED STATES OF AMERICA, YOU DO NOT HAVE THE RIGHT TO PURCHASE OR HOLD HPX TOKENS.



*HyperX - the crypto payment solution for private deals
The bridge between selling used everyday-objects and the
world of crypto-currencies*

The link between private deals and the revolution of decentralization

HyperX helps to experience the world of crypto-currencies in a less abstract way and brings the advantages into the everyday-life experience of the user.

With HyperX it is possible, to realize transactions between private persons in a fast & secure way.

This project is the bridge (or the missing link) between selling used everyday-objects and the world of crypto-currencies.

Mission

Our mission is to design the future technology blockchain in a very suitable way for the daily use and to add the advantages of it into the everyday-life experience of the user.

Also, HyperX is targeting users which may have heard of crypto-currencies, but feeling unsure in using them. Our system makes it possible to sell used everyday-objects fast & secure private based way. The payment-process will be realized with the HyperX-Token - after that, the token can be changed easily into your preferred crypto-currency. Perfect fit for people, who won't spend their private-capital into crypto-currencies.

This creates different win-win situations and every participant will benefit of it.



Selling-side: Fast & secure access to the crypto-market with kind of a „second-hand“-investment.

Buyer-side: Ultra-fast & secure transactions working on the decentralized Waves Blockchain with the HyperX-Token.

Special advantages of the HyperX-ICO

The HyperX-Ico brings special advantages to the long-term-investor

Favorable access to the HyperX-Token during the pre-sale phases and as a result of that a stronger purchasing power within the HyperX-Marketplace. This means, for the early-bird investor it will be possible to buy his favored used everyday-object for a distinct lower price.

Think about the possibility: What if you could buy your favorite product in a fraction of the regular price according to „Fiat“-money? The HyperX-Ico makes it possible.



Technology in everyday-life

HyperX defines itself as a problem-solver in a fast growing digital world. The technological possibilities are developing in a faster and faster way - but the integration into the real-life environment of the user is still a problem. A gap accrues between the existing technologies our times and the everyday usage of them.

A lot of users are skeptical about new technologies because they look complicated or abstract to them. Also the technologies are far away from the everyday-life experience of the user.

HyperX is closing this gap - it combines decentralized private deals with life-experience.

It has never been so easy to sell your used everyday-objects and experience all advantages of the blockchain-technology. Fast, secure & with a maximum of usability.

Allow conservative investors access to the crypto-market

Minimize your own risk and enter the crypto-market with a kind of a „second-hand“-investment. If your account balance don't allow you to participate on the crypto-market, maybe the old Blue-Ray-Collection or your old washing machine will do this for you. Or what's about your old mountain-bike in the basement you want to sell? It's up to you.



James wants to sell his old computer in a private-based way, but he is also interested to the fast growing crypto-market.

Because he is thinking in a future-oriented way, regular selling-platforms don't fulfill his expectations and needs.

What if it would be possible for him to change his old computer directly into his preferred crypto-currency? This would save money and he would have direct access into the crypto-market. HyperX makes this possible for him.

James is enthusiastic about this idea and wants to try it by himself as soon as possible. He makes a picture of his old computer and makes an upload with a description of it on the HyperX-Marketplace. There it's possible for James, to set the selling-price converted in HyperX-Token - in James case 300 USD will equate to 600 HyperX-Token.

The time has come: A buyer is interested in James old computer and contacts him - both parties agree about the price and the selling-process on the HyperX-Marketplace begins. The buyer transfers the amount of tokens within seconds to James, who receives the payment within a blink of the eye on his wallet. James is excited: He never thought that his access to the crypto-world would be so easy & fast to achieve.

Within the integrated HyperX-wallet he can change the HPX-Token into his favorite crypto-currency or do shopping interesting products.



Why Waves is the excellent backbone for the HyperX Marketplace

It delivers a lot of advantages for the user

The Waves Platform is a global public blockchain platform, founded in 2016. Waves Platform's mission is to reinvent the DNA of entrepreneurship around the world by providing a shared infrastructure, offering easy-to-use, highly functional tools to make blockchain available to every person or organization that can benefit from it.

WAVES is a decentralized blockchain platform focusing on custom blockchain tokens operations. National currencies transfer is maintained on the WAVES blockchain through compliant gateway operators.

Issue, store, manage, trade, and analyze your digital assets safely with Waves blockchain platform and decentralized exchange.

Create a multiple-currency wallet

In addition to Waves tokens, thousands of other kinds of tokens have also been released on the platform, many of which have gone through an ICO and have huge potential. Waves supports fiat money (\$, €) as well as cryptocurrencies such as bitcoin, ethereum, ethereum classic, and more. The list is constantly expanding.



Transfer funds from person to person

Waves has a high network speed with hundreds of transactions per second and a small commission, which makes it as convenient as possible to transfer crypto currencies between network members instantly.

Take advantage Waves platform's high security Your balance is stored on a blockchain that only you can access. Only you can manage your crypto assets. Your tokens are stored on a blockchain that only you can access.

Decentralized Exchange

By trading on a centralized exchange, you risk losing your funds in the event of hacking, which has happened on almost all popular exchanges. The main advantage of Waves exchange is that the money is always stored in your wallet, and the match only compares orders.

You retain complete control over your funds when trading them on our decentralized exchange. The DEX is powered by a matcher, which stores user orders and sends token exchange transactions for fulfilled orders.

Stop worrying about the safety of your assets – the Waves Blockchain is a safe solution.

Trade quickly and secure

All transactions happen on the blockchain, and only the order list is held on the centralized matcher. This allows us to take full advantage of both centralized and decentralized technologies. In addition, implementing the latest developments has allowed us to increase network capacity to hundreds of transactions per second.



Trade without limits

On centralized exchanges, it's the administrators who decide which pairs will be traded. Waves' DEX allows you to trade any token pairs that are on the blockchain. In addition, there are no restrictions on the withdrawal of funds from the DEX. As soon as your transaction is complete, the crypto currency will appear in your wallet.

Don't waste money on high fees

There is a very low and fixed fee on our exchange, which doesn't depend on the size of the trade. The commission per order is 0.003 WAVES. If an order isn't executed in full, an incomplete and proportional commission is calculated for you. By canceling the order, you lose nothing.

Protection from front-running and other fraud

Your orders are transferred to the matcher over an encrypted channel and are not visible to other participants until the moment of execution. This excludes the possibility of unscrupulous traders manipulating information about an upcoming trade.



A scalability comparison between Bitcoin, Ethereum, Waves and Waves-NG

Scalability comparison

Blockchain System	Block Time	Block Size	TXs/s
Bitcoin	10 minutes	1 MB	3-7 TX/s
Ethereum	15-30 seconds	2-22 KB	2-22 TX/s
Waves	1 minute	2-24 KB	1.6 TX/s
Waves-NG	1 Minute/KeyBlock 3 Seconds/MicroBlock	1 MB 65535 TX/KeyBlock 200 TX/MicroBlock	1000 TX/s

Weaknesses of Current Proposals to Improve Scalability

Blockchain systems can process transactions and the maximum rate of these transactions is limited by the choice of two parameters: block size and block interval.

The block interval defines the average amount of time that passes between the creation of two blocks. By deciding to reduce the block interval to solve the latency limit, the system will have less security (increases fork probability) due to multiple miners solving the same block which leads to instability as the blockchain is subject to reorganization and the system is in disagreement (Figure 1). If we reduce the time per block, then we will have a situation where a significant number of blocks are solved in less time than it takes to relay a solved block throughout the network. As a result, there is no way to know which block is the "real" one and which one is a "fork" because the transactions that appeared to have multiple confirmations suddenly have fewer confirmations (or possibly go back to being unconfirmed).

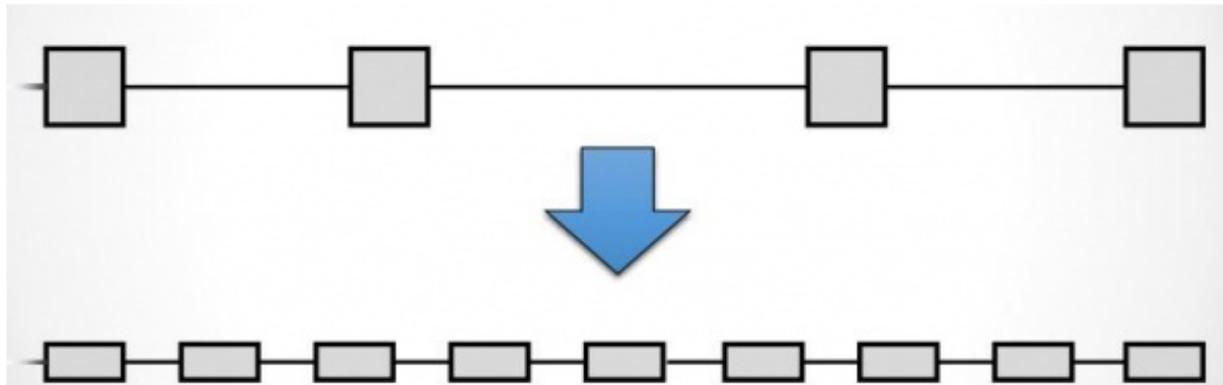


Figure: Increasing block frequency with static block size results in less security

The throughput of a system is bound by the maximum block size (given a fixed block interval) as the maximum number of included transactions is directly dependent on the block size. Larger blocks do however cause slower propagation speeds which causes more orphaned blocks (increased miner inefficiency). An unlimited block size could, for example, result in a Denial-of-Service attack on the system by creating a block that takes a long time to validate. If the choice is to increase block size in order to improve throughput, there will be network spikes with longer time to propagate over the network

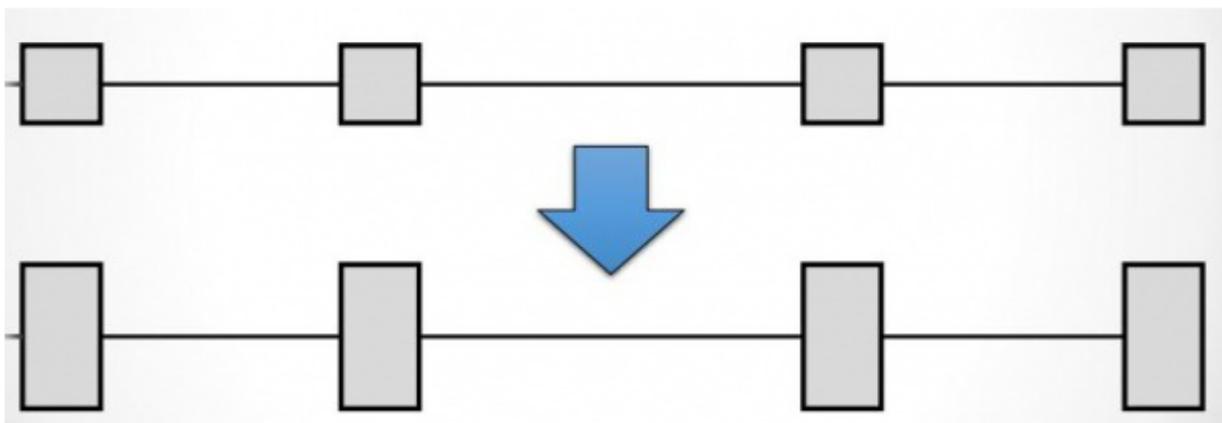


Figure: Increasing block size with static block frequency will lead to more orphaned blocks and network spikes



Brief Summary of Bitcoin-NG

Bitcoin-NG is a next-generation blockchain protocol which is an alternative bitcoin scaling solution that does not involve increasing the size of blocks or decreasing the block time interval. This reduces the risk of forks amongst other advantages. Bitcoin-NG describes that the basic trade-offs in Bitcoin can be reduced with an alternative blockchain protocol, offering a consensus delay and bandwidth limited only by the network plane. The protocol splits time into time periods (epochs). In each time period, a particular leader is responsible for serializing transactions (Figure 3).

The leader takes the responsibility of generating blocks:
Key blocks for the election of a leader.
Micro blocks for ledger records.

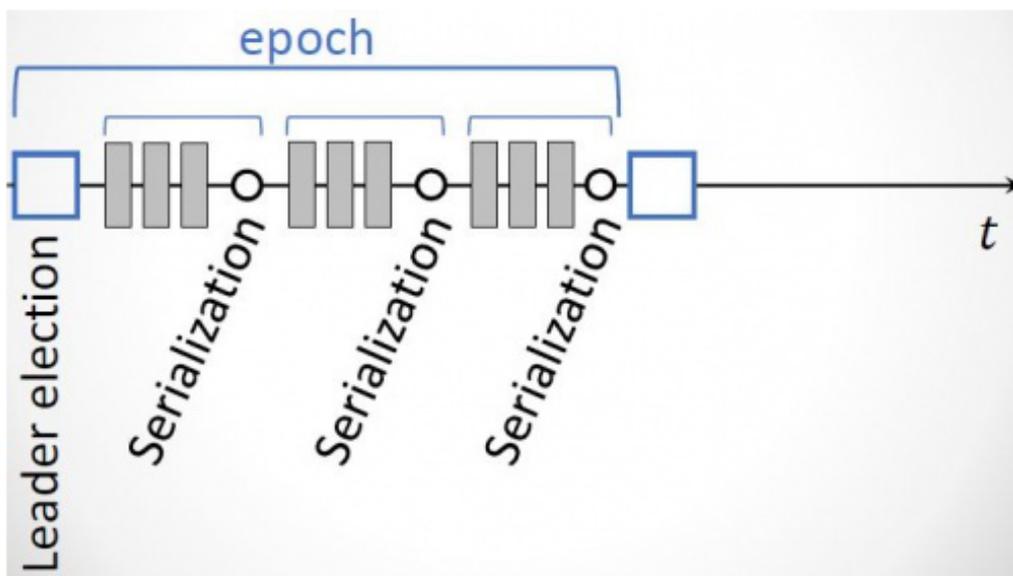


Figure: Bitcoin-NG time period structure with transaction serialization



All transactions are part of the same block and are serialized together. In between blocks, the traditional Bitcoin system appears idle to an onlooker, as miners are working to discover the next block, but without apparent progress on the consensus front. In contradiction, with Bitcoin-NG, the key blocks can be small because they need to contain only the coin base transaction which defines the public key that the miner will be using to sign micro blocks. Because a key block does not require Proof-of-Stake or Proof-of-Work, miners cannot just produce one and expropriate the leadership at will. Following the key block, the leader frequently issues micro blocks by simply signing them with the private key corresponding to the public key named in the key block's coin base (Figure 4).

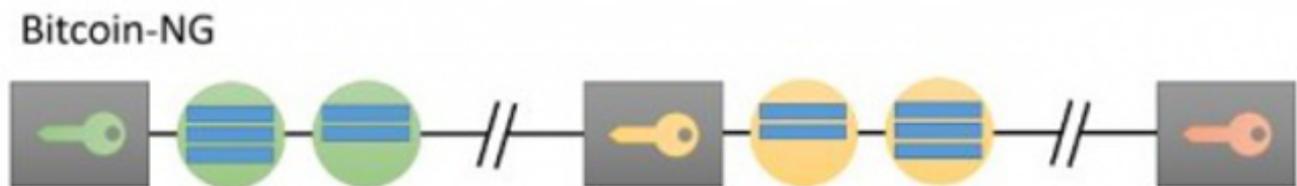


Figure: Key blocks and micro blocks signing process



Waves NG Overlay

Waves-NG is based on the Bitcoin-NG protocol that serializes transactions and offers important improvements in the transaction latency (lower latency) and bandwidth (higher throughput) compared to Bitcoin without sacrificing other properties or increasing number of forks.

Waves approaches this scalability matter by providing the miner with the ability to farm a block during the time of mining with a continuous approach. This continuous block increment is called a liquid block. The liquid block is unalterable over time once the next liquid block referencing the previous one is created and appended. The main and core idea of Waves-NG is to split the liquid block into two types: Key blocks and micro blocks. The process of creating liquid blocks works as followed:

The miner node gets the permission to create a block. The miner node creates and sends the key block (which does not contain transactions).

The miner node creates and sends the micro blocks (which contain transactions just as in normal blocks with a reference to the previous micro or key block) at a frequency of 3 seconds.

Miners will mine those micro blocks and propagate them directly to the network until the next new key block appears with a reference to the liquid block.



Waves-NG with Proof-of-Stake Protocol

Waves platform is using a Proof-of-Stake instead of Proof-of-Work protocol which results in a different approach for the implementation of Bitcoin-NG. The miner is able to update the generated block with new transactions and push those transactions to the network at low block generation fees due to Proof-of-Stake. In Proof-of-Work, however, it's significantly more expensive to serialize transactions as solving the block puzzle requires a lot of computational power. As a result, the Waves blockchain will be able to handle thousands of transactions per minute without sacrificing the concept of decentralization. After a successful implementation of Waves-NG with low transaction fees and maximization of throughput, the Waves network will be ready and suitable for high-load applications.

Leader Blocks

Also called "Key Blocks". These blocks are generated with Proof-of-Stake (PoS) but do not contain transactions. They serve as a leader election mechanism and contain a public key that identifies the chosen leader. Each block has a header that contains, among other fields, the unique reference of its predecessor which is a cryptographic hash of the predecessor's header (either a key block or a micro block). As in Bitcoin, for a key block to be valid, the cryptographic hash of its header must be smaller than the target value. Unlike Bitcoin, a key block contains a public key that will be used in subsequent micro blocks to sign transactions.



Micro Blocks

Once a node generates a key block, it becomes the leader. As a leader, the node is allowed to generate micro blocks at a set rate smaller than a predefined maximum. These micro blocks will contain the ledger entries with no requirement for any Proof-of-Stake and they are solely generated by the elected leader for that block-generation cycle. This block-generation cycle is initiated by a leader block. The only requirement is to sign the micro blocks with the elected leader's private key. The micro blocks can be generated at a very high speed by the elected leader (miner), thus resulting in increased performance and transaction speed. For a micro block to be valid, all its entries must be valid according to the specification of the state machine, and the miner's signature has to be valid.

Waves-NG Reward Mechanism

Miner reward is comprised of two parts. First, each key block entitles its generator a set amount. Second, each ledger entry carries a fee. This fee is split by the leader that places this entry in a micro block and the subsequent leader that generates the next key block. In order to motivate participants to follow the protocol, Waves-NG uses the following mechanism: Each transaction pays a fee to the system which is re-distributed to miners: 40% to the current epoch's leader and 60% to the subsequent leader.



Finally, if a leader forks the chain by generating two micro blocks with the same parent, it is punished by revoking the subsidy revenue; whoever detects the fraud wins a nominal fee.

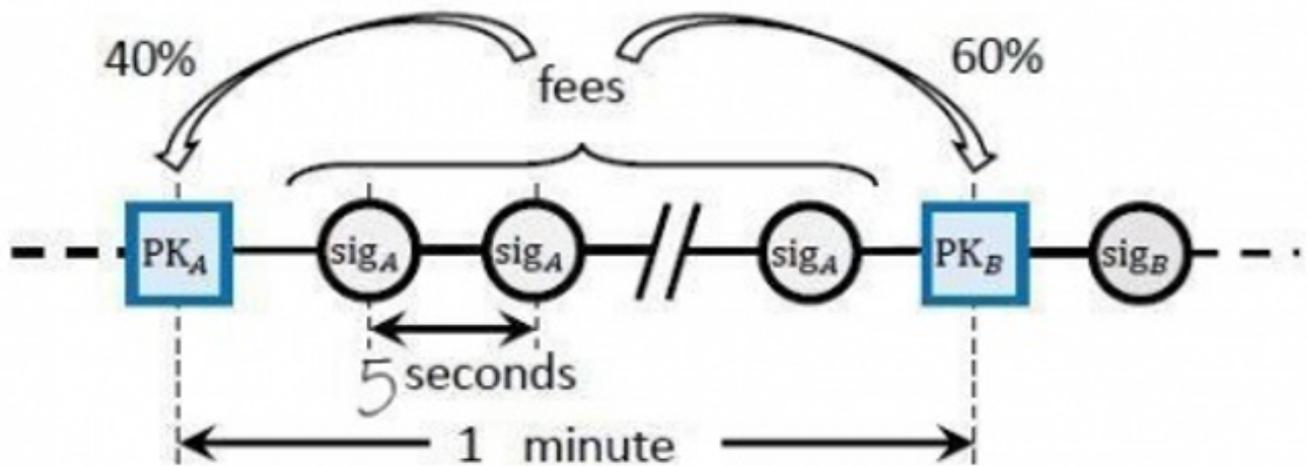


Figure: Chain structure of the Waves-NG protocol. Micro blocks (circles) are signed with the private key matching with the public key in the last key block (squares). Fee is distributed 40% to the current leader and 60% to the next one.



C2C is a category of e-commerce which allows consumers to interact with each other. This model of e-commerce facilitates transactions of products or services between consumers. In business to consumer model, a consumer approaches a business to purchase goods or services.

In C2C model, the business provides a platform where consumers can sell products or services to each other. The main goal of C2C is to help buyers find sellers. This benefits both the parties. A buyer finds a product or a service which would have otherwise been hard to find and a seller benefits by selling the product or a service.

The platforms for such transactions are usually provided by third parties, which act as intermediaries between the sellers and buyers.

For instance, online portals such as E-bay facilitates sellers to post their goods or services online that is available for consumers to purchase. In such transactions, the third party may charge a transaction fee or commission. Products sold on these websites can be new or second hand.

The proliferation of Internet services across the world and the significant increase in the use of smartphones can be attributed as major factors to facilitate the C2C e-commerce market growth. Users can sign-up on online portals providing C2C services and begin to buy or sell desired products or services.

The reduction in the costs of these products and services, due to the absence of middlemen, wholesalers and retailers involved in the transaction has further aided to the growth of global C2C e-commerce market. Moreover, sellers are no longer restricted to local regions and can reach national and international audiences.



Furthermore, the need of capital investment on outlet stores is eliminated and the inventory costs are reduced. This enables the sellers to sell their products at higher prices and at the same time buyers can purchase them at comparatively cheaper prices. Also, the convenience associated with this model with regards to ample choices available to buyers is an advantage for the subscribers of such portals. The advent and increasing popularity of online payment systems is expected to fuel the growth of C2C e-commerce, globally.

However, Internet frauds and identity threats, absence of payment guarantees are the hurdles in adoption of these services. C2C websites have no control over the quality of goods being sold on them as they only act as intermediaries. The possibility of illegal or pirated products sold through such websites is a threat to the C2C market. The Hyperx-Marketplace has a high-security registration-process which reduces this risk to a minimum.

On the basis of source of revenue, the C2C e-commerce market can be broadly segmented into classifieds and auctions. Classifieds can be further segmented into products and services. In terms of geography, C2C e-commerce market is segmented into North America, Europe, Asia Pacific, Middle East and Africa (MEA) and Latin America. North America is one of the leading regions in the global market because of high penetration of Internet and a large number of smartphone users. Asia Pacific is expected to witness rapid growth in the coming years due to the rise in Internet and smartphone users, mainly in China and India.

The key players in the C2C e-commerce market include eBay Inc, Amazon.com, Inc., Craigslist, Inc, Taobao.com, OLX, Inc, Quikr India Private Limited , uBid.com, Auctions.com and Airbnb.



The HyperX-Marketplace is a tool to enable private deals and to sell used everyday-objects, based on the the HPX-Token. First, the seller adds his product on the HyperX-Marketplace. He describes & uploads the product he wants to sell and is setting the price, converted into HyperX-Token. A buyer is searching for products in the Marketplace and decides to buy his favorite one. Seller & buyer agree on the price & trading takes place with HyperX.

The HyperX-Marketplace features a wide range of settings for a maximum of usability. Search for products with keywords, environment or product-categories.

The HyperX branded wallet

With our integrated HyperX branded wallet, it is possible to interact directly with the world of crypto-currencies and the HyperX Marketplace. It's easy and safe to use and will be realized & available after a successful ICO.

It is possible for the seller to exchange his earnings directly into his HyperX-branded wallet. Now the user is having access to almost every relevant crypto currency or fiat money (EUR/USD). Desposit with fiat money is possible. Discover the menu item „Portfolio“ in the wallet and have access to the wide world of crypto currencies.

The wallet delivers transactions near to real-time with low transaction fees.

Based on a decentralized technology, it is possible to create new exchange-possibilities. For example HyperX/LTC or what crypto-currency matches your interest as its best. This is an advantage according to centralized exchange-platforms like Bitfinex or other.



High-Security registration guaranteed

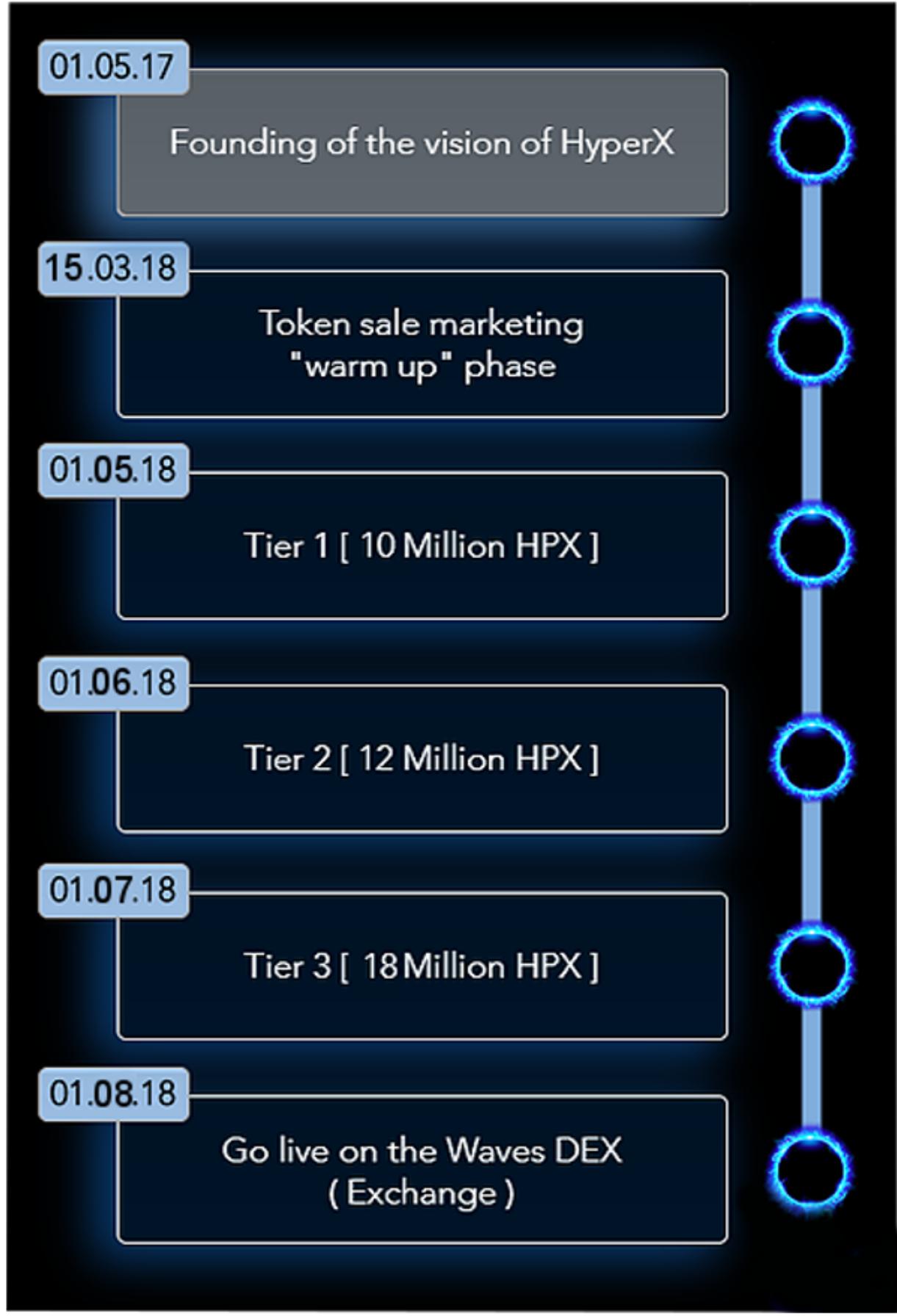
The HyperX Team takes care about a high-security registration process. Through this process it's possible to minimize the risk of getting in trouble with unserious users or getting stolen.

Every user must go through this registration-process. This contains a double check of your Wallet-ID and registration name, including an optical verification. Once the seller and buyer have contact, they can check the registration-data like Address, Name or age of each other. This brings a big advantage in security using the HyperX-Marketplace. A safe payment & shipping process is the heart of the HyperX-Marketplace and we do everything to fulfill this important issue.

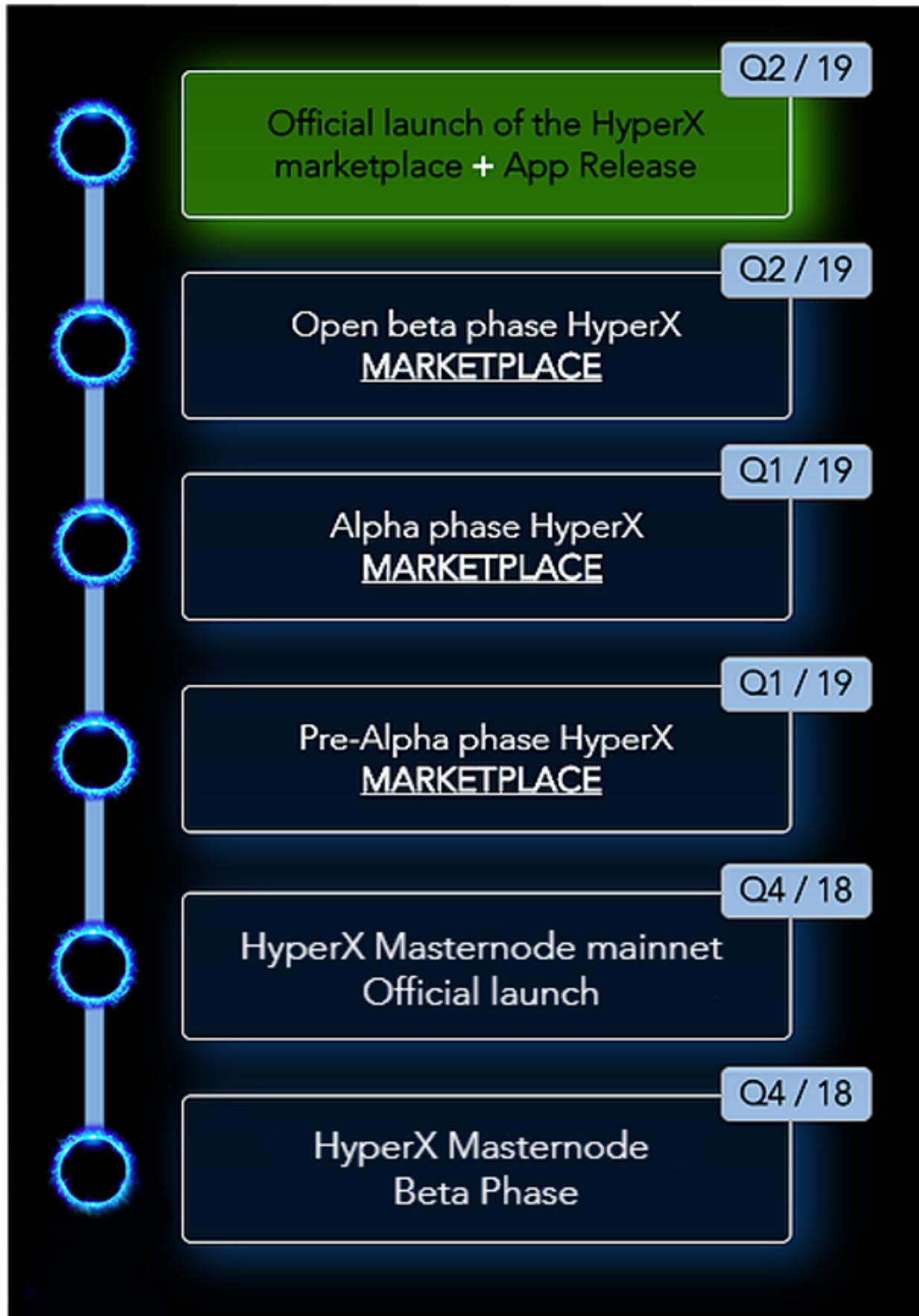
One-hand-experience

The integrated processes on the HyperX Marketplace are standing for a one-hand-experience. You don't need interconnected payment-processors or banking institutes. Through the HyperX branded wallet the user is having all the possibilities to exchange a lot of crypto-currencies and USD/EUR. This implies a big advantage in case of speed, security and usability. Create your new account within a minute and have access to the HyperX wallet, the Marketplace & exchange-possibilities. You just have to keep your seed safety, the account is just for one session valid. This reduces the risk of getting hacked.

ROADMAP



ROADMAP

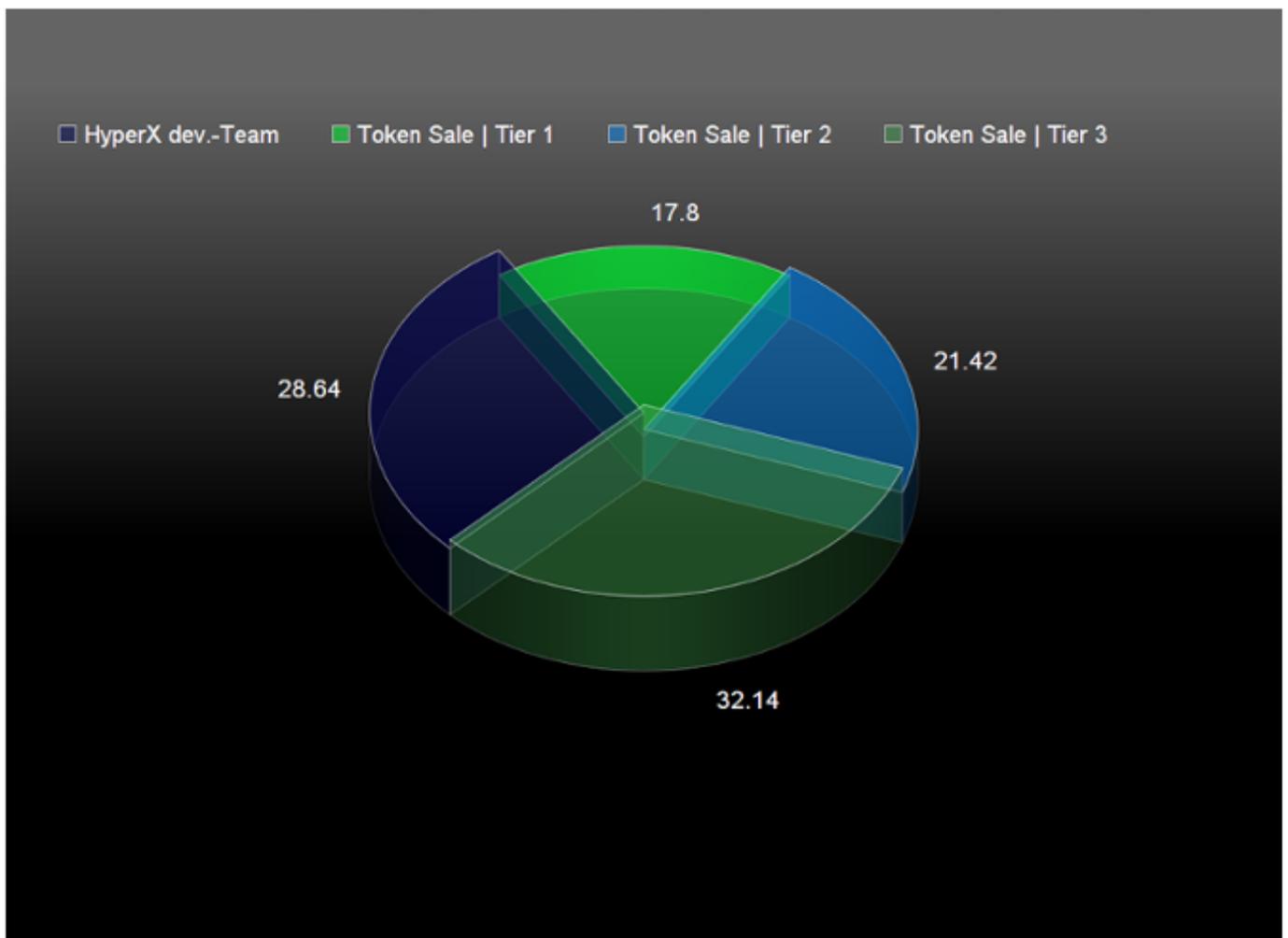




The entire token distribution will be realized in different steps,
Token Max. supply: 56.000.000 HPX.

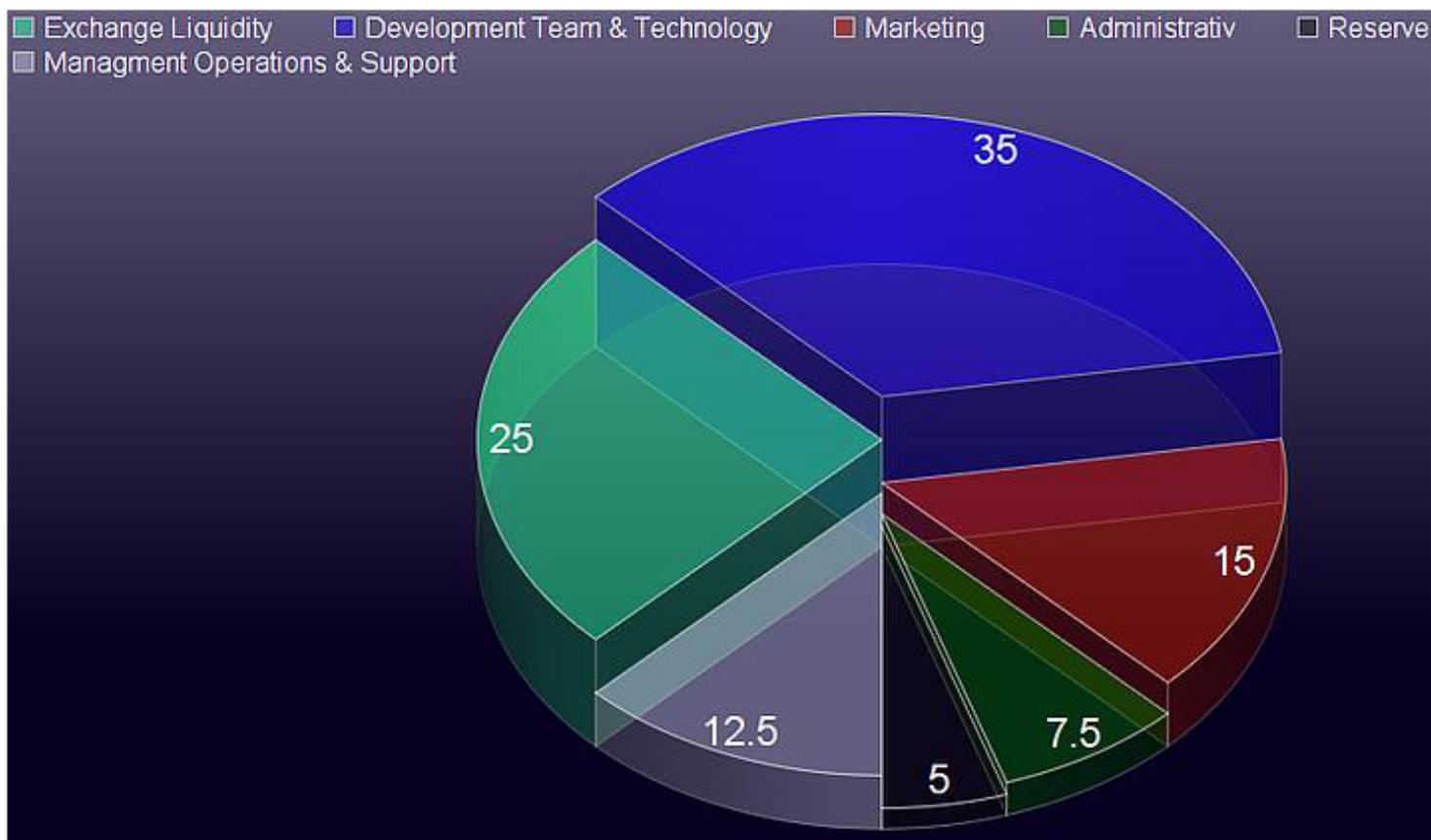
In Tier1 Token sale 17,8 % of the HPX-Token will be distributed.
Followed by Tier2 where 21,42% of the HPX-Token will be distributed and finally Tier3 with 32,14 %. The HyperX dev-team holds 28,64% for pushing the HyperX project forward and to realize the mass-adoption of the HyperX Marketplace.

The proceeds of the token sales as well as the tokens that remain in possession of the team will be used to promote and develop the project as outlined in the Road Map section of this paper.





In the figure below, we show how the proceeds will be utilized. As we have shown earlier HyperX development is intense, therefore we allocate the majority of the proceeds to development and operations as we believe that proper management and highly skilled developers are in the core of the success of this project.



Fund allocation: Exchange liquidity: 25 %, development team & technology 35 %, marketing 15 %, management operations & support 12,5 %, administrative 7,5 %, reserve 5 %.

We believe in the blockchain technology and hope that the HyperX-Marketplace will contribute to this.



What is a Masternode

Simply put, a masternode is a server on a decentralized network. It is utilized to complete unique functions in ways ordinary nodes can't. It can be used for features like direct send / instant transactions or private transactions.

Because of their increased capabilities, masternodes typically require a sizable investment in order to run. But this is where incentivization comes into play, as masternode operators are rewarded by earning portions of block rewards in whatever given cryptocurrency they're facilitating.

No masternode is quite alike as each network has its own pros and cons, but with that said, every system approaches payouts in a different way. Some cryptocurrencies pay out rewards to masternode operators multiple times in a day, whereas other projects payout operators once daily. The benefit of this dynamic is that operators can still earn money and provide a service to the network without having to invest in expensive cryptocurrency mining gear.

If interested in becoming an operator yourself, you'll need to "lock away" what's usually a large number of coins and set up a server through which these holdings can do their magic, as it were.



Not Necessarily Proof-of-Stake (PoS)

Many cryptocurrency users who don't know better assume that masternodes are an extension of Proof-of-Stake (PoS) coins (i.e. cryptos that aren't mined, but are staked), but that's not true. There are Proof-of-Work (PoW) projects that make use of masternodes, so these kinds of nodes aren't exclusive to PoS or PoW.

With that being said, running a masternode is PoS-like, in the sense that you generate passive income through a masternode just by holding your coins, similar to how stakers earn in PoS systems.

So it's something to consider: you can make passive income with a masternode just like you could through a PoS cryptocurrency, but you don't need PoS cryptos specifically to run masternodes.

How Much Money Can Masternodes Earn?

Well, that depends on a few factors:

What coin you select

How that coin facilitates masternodes

How much your selected coin appreciates in value in the coming years

So there's no one-size-fits-all answer, as every project will work differently. Some will be more profitable than others, some less so. But regarding the third point above, everyone running masternodes will be sitting pretty if the entire cryptocurrency market continues to surge up in unison.



If all coins are worth significantly more in ten years than they are now, then running masternodes will end up being very profitable for everyone who took the leap with one pretty much regardless of which crypto you chose. Though, as always, nothing is guaranteed in life, no matter how obvious it seems that the crypto economy has heaps and bounds to grow from here.

But, in getting into the nitty gritty, masternode operators typically win anywhere between five percent and 20 percent of a given block reward, depending on which cryptocurrency is being supported. These rewards help offset the costs of running masternodes in the first place, while also inspiring the creation of further masternodes.

The bottom line? A masternode is sort of like next-level holding. You have to “hodl” a large amount, but in doing so according to the specialized process, you’ll earn constant block reward payouts. And these payouts could be a trove in a decade if prices continue trending upward in the long-term.

How To Host A Masternode

If you want to run your own masternode, you’ll need to start getting some familiarity with Linux command line.

Alternatively, if you’re happy to pay for the services of experts, you can always find a reliable third-party server provider and hire their services.

Depending on which company you go to and what package you choose, your server hosting costs should be somewhere into the dozens of dollars.



You'll need to do some research and see what route or what package is right for you, but rest assured you have multiple options. Whittle down your choices to the providers that seem most reputable and worthy of their price.