Whitepaper Ver. 1.0

Contents

01 Background

The Hashshare(HSS) Project

The HSS (Hashshare) Project is the world's first project to combine the Bitcoin mining system and the Masternode. The HSS project was developed with the establishment of an efficient and stable Bitcoin mining system for anyone to participate in. The HSS team needed a cryptocurrency to promote global participation in diverse businesses funded by mining profits and began to devise a network which could provide transparency and privacy based on the transaction purpose. HSS network participants receive rewards in HSS based on their contribution to maintaining the security and stability of the network, rather than simply participating in a mining project. In addition, the use of HSS will be expanded by investing the revenue generated from the foundation in projects prepared separately by the HSS team, which will increase the value of HSS. The three key advantage s provided by the HSS ecosystem are as follows.

1. Establishing an efficient and reliable mining system

The HSS team will proceed strategically with mining in China and Kazakhstan to enhance profitability. Mining has already begun In China and another mining facility will come online in Kazakhstan in September. China and Kazakhstan have many advantages in establishing and operating mining facilities because electricity rates are low. People living in countries with low mining profitability due to high electricity rates can be allocated Bitcoin mined in China and Kazakhstan without purchasing ASIC equipment through HSS network participation.

2. Procuring a variety of use cases

To stabilize the value of HSS and raise it in the long term, the HSS Foundation will secure a place for the use of HSS. Various projects will be carried out funded by revenue generated from Chinese and Kazakhstani mining sites operated by the HSS Foundation, and various uses of HSS will be prepared by expanding the business scope from mining equipment consignment and sales to VR (virtual reality) content and an AI trading business

3. SwiftTX for fast transaction

HSS creates a block every 60 seconds to enable faster transmission, and by implementing instant SwiftTX, we ensure fast transactions without any waiting time by verifying blocks at the near real-time speed on the Masternode network instead of omitting the redundant steps in the confirmation procedure of the transaction.

02 What are PoS & Masternode?

Consensus algorithm by PoS and Masternode

Definition of PoS

The Proof-of-Stake (PoS) consensus algorithm is an alternative to Proof-of-Work (PoW) and is the first consensus mechanism introduced by Peercoin in the blockchain industry. The PoS method differs from the PoW method in that the authority for generating a block is determined based on staking behavior, not the computing power of the participant. As a result, the PoS settlement method has lower entry barriers to network participation than the PoW method, which increases the chances for individual participants with small amounts to contribute to the security and stability of the network and receive a reward in return.

Strengthen the security of the network through a penalty system

In a PoS-based network, stake participants begin with a security deposit for network stability. Stake participants are also referred to as network validators. If a validator does not perform the transaction history validation correctly, some or all of their staking coins may be lost as a penalty. If the amount that the validator may lose from falsifying records is greater than the stake reward, the validator will have no incentive for participation in staking. The staking system, in which assets of all participants must be held in a deposit, becomes a safeguard against which the network can be stably maintained.

Masternode

Nodes, a component of a blockchain network, can be largely divided into full nodes and light nodes. A full node is a node with a copy of all transactions occurring on the network, and the more full nodes there are in a network, the more secure the network becomes. However, since a full node has a huge maintenance cost, it is difficult for anyone to freely participate in the full node without compensation. As a result, a full node can be maintained in a network that can compensate for the maintenance costs of the full node by the amount of mining, as with the PoW method. To enhance the stability of the network, the concept of a Masternode was introduced so that there could be more full nodes holding copies of a network's entire ledger, even if they did not validate transactions or create blocks. When a network adopts the concept of a Masternode, an incentive scheme is established so that a Masternode can maintain a full node. A Masternode receives compensation commensurate with its contribution when providing separate services such as enhanced security of the network, higher transaction speed, or improved privacy.

03 Hashshare PoS & Masternodes

Hashshare's consensus algorithm and Masternodes

The HSS network aims to validate transaction details and blocks without wasting resources through the PoS consensus algorithm and ensure the stability of the network by introducing a Masternode. All participants contributing to the security and stability of the HSS network will be rewarded according to the their contributions. In order to contribute to the HSS network, the HSS must be staked to become **a Staking node** or **a Masternode**. However, there are certain pre-requisites to become a Masternode, unlike a Staking node.

HSS Staking node

An HSS Staking node is a node which validates transaction details and creates blocks on the HSS network. Anyone can participate as a Validator of the HSS network by transferring HSS to a dedicated HSS wallet and connecting to the network. Rewards for participation are allocated according to the number of shares held.

HSS Masternode

The HSS Masternode enhances the security of the network through additional validation not performed by the Staking node and satisfies the various needs of users through the provision of separate services. The HSS Masternode will receive rewards for network participation according to a protocol, and users of the platform operated by HSS Foundation will receive an additional allocation of Bitcoin (BTC) and Ethereum (ETH) mined directly by the foundation. However, the participation requirements for becoming an HSS Masternode are as follows:

1. Provide at least 10,000 HSS as a deposit
2. Maintain a reliable 24 hour Internet network
3. Use a dedicated IP address

04 Hashshare's Business & Service

Hashshare's Business and Premium Services

Based on know-how and experience accumulated over two years, the HSS team provides service in the following areas. Revenue generated from the following sources will be used to repurchase HSS and serves to stabilize HSS value.

First, mining, commissioning, and mining equipment business for cryptocurrencies

Currently, some of our mining equipment is operating in China, which is the center of mining equipment production and boasts cheap electricity rates, and in Kazakhstan, a key country in Central Asia with a favorable environment for mining. In these two areas, ASIC equipment and GPU are operated simultaneously to mine Bitcoin and Ethereum, which are first and second in market capitalization among cryptocurrencies. In addition, by building proprietary mining containers and developing mining pools, we were able to increase mining efficiency and diversify risk. Based on these efforts, we have built a facility that enables stable mining. Current level of power consumption and price prompted us to use mining equipment with excellent price-to-performance ratios. We will eventually expand to a size capable of operating 100,000 mining equipment units at the mining site in Kazakh stan, and will actively attract consigned equipment to share the site. We will also carry out mining equipment sales and repair projects to purchase mining equipment cheaply through efficient sales channels.

Second, HSS Masternode platform

We will provide a Masternode hosting platform to contribute to the expansion of the Masternode ecosystem, by supporting other project teams set up Masternodes, which is what we do for those willing to set up Masternodes in HSS network that incorporates cryptocurrency mining business. We not only help set up and maintain Masternodes, but also enable even first-time users to choose from a variety of Masternode-based projects to build their own portfolios. In addition, each user will be able to easily identify and utilize the various Masternode coins on our platform.

Third, a cryptocurrency trading strategy

Mining project profits will be reinvested in cryptocurrency trading to finance additional projects. Trading will be conducted by trained professional traders based on AI algorithms. They will build up data on various transaction patterns and market psychology to conduct deep analytics and apply it for effective asset management. We will also research macro markets based on Bitcoin, examine good news and bad news of individual altcoins, broaden our understanding of trends in the cryptocurrency market by continuous analysis, build internal data for our traders to learn from, and increase our ability to predict the market by creating forecasting algorithms.

05 Mining Center

Mining Center

First mining site, China Mining Center (starting mid-July, 2019)

The biggest reason for mining in China is reduced time and cost of operation after purchasing mining equipment. Transportation time and cost to the mining site after the purchase of mining equipment in China, the biggest production base of ASIC equipment, and total cost can be reduced because there are no customs. In addition, hydropower plants are well-developed and electricity can be supplied smoothly from eco-friendly energy sources in China. In particular, in the summer when rainfall is abundant, surplus power generated by hydroelectric dams reduces electricity charges.

An advanced mining container is a contained mining setup with highly automated, low-cost maintenance. It automatically generates optimal cooling and controls disturbance elements. Maintenance work is done rapidly and efficiently, and the best way to quickly install and maintain even more customers has been developed.

Photos of the advanced mining container at the mining site at the Hashshare Mining Center in Sichuan, China

Second mining center in Kazakhstan (starting mid-September 2019)

Kazakhstan has significantly fewer regulatory requirements than China and an advantageous environment for cryptocurrency mining. The HSS Foundation secured a USD 0.03 level electricity rate per 1 kW through a contract with an electric supplier at Kazakhstan Weskemen, completing preparations for the inexpensive operation of mining equipment. In fact, Kazakhstan is among the nine countries where it costs the least to operate a mining site. Elite fixtures * surveyed the cost of mining 1 BTC in 115 countries and found that it costs from $531 (Venezuela) to as much as $26,170 (Korea). It costs $3,712 in China, which hosts a large HSS mining site. Of the 115 countries, only nine charged less than $3,000 for the electricity to mine 1 BTC, including Kazakhstan. In addition, Kazakhstan has a climate suitable for mining, with low humidity throughout the year, including the summer, with less precipitation and longer winters. Even if the temperature rises higher than 30 degrees Celsius in summer, it is cool in the shade due to the low humidity. These conditions result in lower cooling costs compared to high-temperature, humid regions. With these climatic advantages, Kazakhstan is the best mining site for significant reductions in electricity charges for mining equipment.

Photos of the mining site at the Hashshare Mining Center in Kazakhstan

* Elite fixtures https://www.elitefixtures.com

Mining container introduction

> The HSS team has optimized mining facilities to maximize the efficiency of mining equipment and set up the latest mining containers at the mining site!

Advantage 1. Self-cooling capability and complete power supply system

The container box minimizes heat generation and allows for smooth airflow. It keeps the mining equipment stable by preventing overheating by releasing the heat generated by ASIC equipment, which performs highly computational work, to the outside of the container.

Advantage 2. Scalability

HSS containers can be stacked like Lego blocks, making them highly scalable. In order to construct a new warehouse facility, a site must be selected, then purchased or leased, but an HSS container can be installed on top of an existing container without expanding the site according to demand, so expansion will not cause any problems. The number of HSS containers at a site can thus be flexibly expanded with no significant limitations depending on the demand for mining.

Advantage 3. Ease of mobility

The container-type mining facility, in contrast to a warehouse type, has the advantage of easy transportation of mining equipment. The HSS team is planning to operate a large mining site in Kazakhstan, which has a favorable mining environment, after first mining in China, which is close to mining equipment manufacturers. The mining equipment containers are moveable and minimize transportation work. In addition, thousands of mining equipment units can be transported to the desired location without any installation work as they are pre-installed within containers.

Mining Center Operation Strategy

At present, the HSS team is conducting its first mining in Sichuan, China, mining Bitcoin with new and secondhand mining equipment with high price-to-performance ratios. The choice of China for the first mining site is to improve profitability by reducing the time and cost of mining equipment transportation, and because the equipment can be exchanged for free within six months if defective. HSS plans to move mining equipment with expired free A/S from China to Kazakhstan, which has been established as the best environment for the operation of a mining site, and operate a large amount of mining equipment in the second center.

30% of Bitcoin and Ethereum mined at China and Kazakhstan mining sites will first be allocated to users who have deployed Masternodes on HSS platforms after deducting operating costs, and 50% will be reinvested in the expansion of mining equipment. The primary goal is to operate a total of 10,000 units of mining equipment – 7,000 units of ASIC equipment and 3,000 GPUs – by the end of 2019, and to operate more than 100,000 units through continuous reinvestment and additional equity investments.

Model		Hash Rate	Algorithm	Power consumption	Expected Profit
	Obelisk SC1 Immersion	2.2Th/s	Blake2B	1,600W	$20/day
	FusionSilicon X1	12.96Gh/s	Lyra2REv2	1,100W	$16/day
	Asicminer Pro 8 Nano	80Th/s	SHA-256	4,200W	$30/day
	Bitfury Tardis	80Th/s	SHA-256	6,300W	$30/day
	MicroBT Whatsminer M20S	70Th/s	SHA-256	3,360W	$14/day

*Mining equipment reference: https://topminer.io/profit

06 The Hashshare Mining Pool

The Mining Pool

If a block is created by individually-operated mining equipment, the block reward will all go to one person, but given the current difficulty of Bitcoin mining, this is highly unlikely to occur. First of all, Bitcoin mining requires devices with high computing power to solve a single puzzle, and ASIC equipment is sold for this purpose. Although individuals can purch ase and operate several units of ASIC equipment, it is very difficult for them to to create a block in a Bitcoin network, because one must beat a large pool of mining equipment that operates thousands to tens of thousands of units of ASIC equipment with individually-held ASIC equipment because block rewards are given to the first person to solve the puzzle. However, these individuals can also share block rewards by entrusting their equipment or participating in pools in a cloud mining manner. Participating in a mining pool compared to solo mining (individual mining) has the following advantages:

First, low volatility in mining revenue!

Solo mining may not produce a single block even after hundreds of days with an individual ' s mining equipment. On the contrary, enterprise-class mining pools running hundreds to tens of thousands of mining equipment units are much more likely to create blocks than individuals. In a mining pool, all mining equipment providing computing power are used to create blocks, and the entire block reward is allocated according to the hash power contributed by each miner. Thus, unlike solo miners who are endlessly solving puzzles with out retrieving the cost of electricity and mining equipment, mining pool participants are all ocated coins daily in accordance with the hash power that they contribute to the total mined amount of the pools to which they belong.

Second, convenience!

Solo mining involves many tasks and expenses, such as purchasing and configuring mining equipment, installing software, securing cooling equipment, and paying for electricity, but mining pool participants only purchase their desired hash power and monitor the daily mining status because the pool manager takes care of everything.

Third, low barriers!

By participating in a mining pool, one can start mining at a lower cost than doing solo mining. If an individual is to mine alone, he or she must bear the initial investment in mining equipment and pay for expensive electricity. If one participates in a mining pool, he or she will receive as much hash power as they wish to purchase, and the coins mined from the pool will be allocated according to the purchased hash power after deducting various expenses. Therefore, those who participate in the pool are relatively less burdened than investors who use their own equipment because they can adjust the initial investment cost for hash power purchases at will.

07 Hashshare Trading & VR Contents

HSS AI Trading System

HSS team has established a system that continuously provides buying and selling signal of various cryptocurrency by learning various indicators and patterns needed for trading from AI bot. The system is at 28 of Trade, API HSS the teams trading platform to develop a monitoring and situation of each exchange to work in real time on a single platform. This, in traded currency can sell and buy a password.

HSS' professional trader team conducts training based on signals sent by AI bot. When they find new patterns, they build data that reflects them and update AI bats periodically. Ultimately, it wants to manage its portfolio of cryptocurrency investments and increase its profitability by adding experience from professional traders to its AI bot.

HSS VR Contents

Another project prepared by the HSS team is to develop and distribute games of various genres as VR content. Starting with single-player content that can be operated on partner companies' exclusive experience devices, contents that can be multi-played will be produced and distributed to VR theme parks. Its goal is to keep users experiencing virtual reality through continuous updates of existing content and continuous investment in new content.

VR machine of Forty

08 The Hashshare Platform

HSS Masternode platform

In order to extend the Masternode ecosystem, the HSS team developed the **HSS Masternode platform** that enables users to participate in Masternodes running on networks other than the HSS network. This makes it easy for many people to participate in various blockchain networks and receive rewards, without having to directly operate servers. In addition, teams with Masternode-based projects can receive marketing and technical support through the HSS Masternode platform.

Portfolio

The first single product presented by the HSS team is Hashsharecoin (HSS), a coin issued by the HSS foundation. Individuals willing to participate in the Hashsharecoin network's Masternode can apply on the HSS Masternode platform to set up their Masternode, after purchasing HSS at an exchange where it is listed. The HSS specialist team will build a portfolio based on profitable projects by referring to various indicators, including community participation and price stability for each cryptocurrency project that adopts masternode technology. Later, end users can subscribe to packages provided by the HSS Masternode platform with HSS and BTC, and receive a small discount if they participate in HSS.

Shared Masternode service

The HSS platform provides a shared Masternode service, which allows participation without meeting 100% of the deposit requirements for a different Masternode from network to network, and reward allocations are made based on the deposit provided. HSS holders can select a cryptocurrency that supports Masternodes by voting and adding it to their portfolio. Accordingly, if a company has introduced or is planning to introduce a Masternode, it can ask the HSS platform to find a way to rapidly expand the Masternode.

09 Hashshare Ecosystem

HSS Tokens and Ecosystem

The HSS network can be used for mining Bitcoin and Ethereum with a small investment by individuals without having to prepare mining facilities which are expensive and difficult to operate. HSS holders can either run a Masternode or can stake easily through their wallet and join the HSS network as a node.

HSS Masternodes and Staking nodes receive rewards in addition to Bitcoin and Ethereum which are generated according to protocols on the network. As mentioned earlier, after deducting electricity charges and operating costs from Bitcoin and Ethereum mined in China and Kazakhstan, 30% will be paid to users who have built a Masternode on the HSS platform, and 50% of the total will be reinvested in the mining facility to increase the amount of mining that the Masternode and Staking node can receive.

The HSS Foundation not only mines in China and Kazakhstan, but also conducts an entrusted mining and mining equipment business, and provides HSS holders with more benefits through the HSS Masternode platform and cryptocurrency trading service. When HSS is listed and traded on the open market, it will carry out a quarterly HSS buyback with 30% of the revenues generated from the VR (virtual reality) content business, entrusted mining, equipment business, HSS Masternode platform, and AI trading service operated by the HSS team.

Ecosystem Components

1. Users: HSS Traders, including Staking node and Masternode participants, and anyone who wants to take advantage of HSS's fast remittance function.
2. Staking nodes: HSS Network Validators, who receive transaction fees from network users as rewards.
3. Masternodes: HSS network security enhancement and additional service providers, sharing network fees with Staking nodes.
4. The HSS Foundation: HSS issuer and decision maker for project expansion funded by mining revenues.

10 Hashshare Operating System

As mentioned earlier, HSS, with the introduction of the Masternode, enhances the stability of the HSS network and supports rapid transactions with the SwiftTX feature. It was also said that Bitcoin and Ethereum mining volumes will be allocated to users who have deployed the Masternode and that some of the revenue generated from HSS's business will be used for HSS buyback. The advantages of HSS do not stop here but also have the following features.

Resolve scalability issues with elastic adjustment of block size!

The block size of HSS is flexibly adjustable to ensure rapid data transmission even when data traffic suddenly peaks or when attacks are made on the network. Therefore, the stability of the network is maintained by ensuring high block size elasticity.

Convenient governance features

HSS users can perform all governance-related functions (i.e. voting) inside the HSS platform without accessing the website or installing and utilizing the debugging console.

Low fee

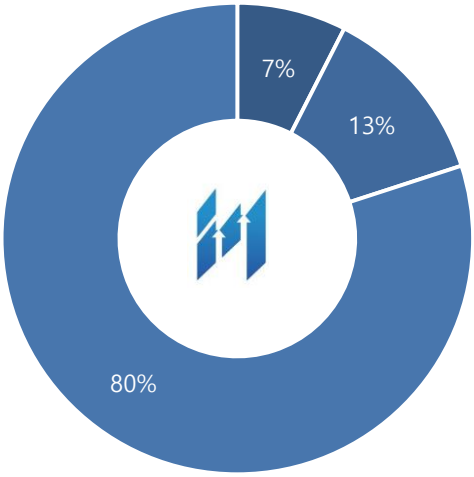
When using HSS, a 0.04% fee is charged on every transaction. For example, when an HSS user purchases an item worth KRW 30,000 through HSS, a fee of only KRW 12 is charged.

11 Token Economy

Token Summary

- Coin Name: Hashshare
- Ticker: HSS
- Masternode Collateral: 10,000 HSS
- Block Distribution: 80% MN + 20% Staker
- Total Supply: 200,000,000 HSS
- Premine: *40,000,000 HSS
- Block Time: 60 Sec
- Maturity: 61 blocks
- Stake Age: 1 hr
- Last POW: 200 Blocks

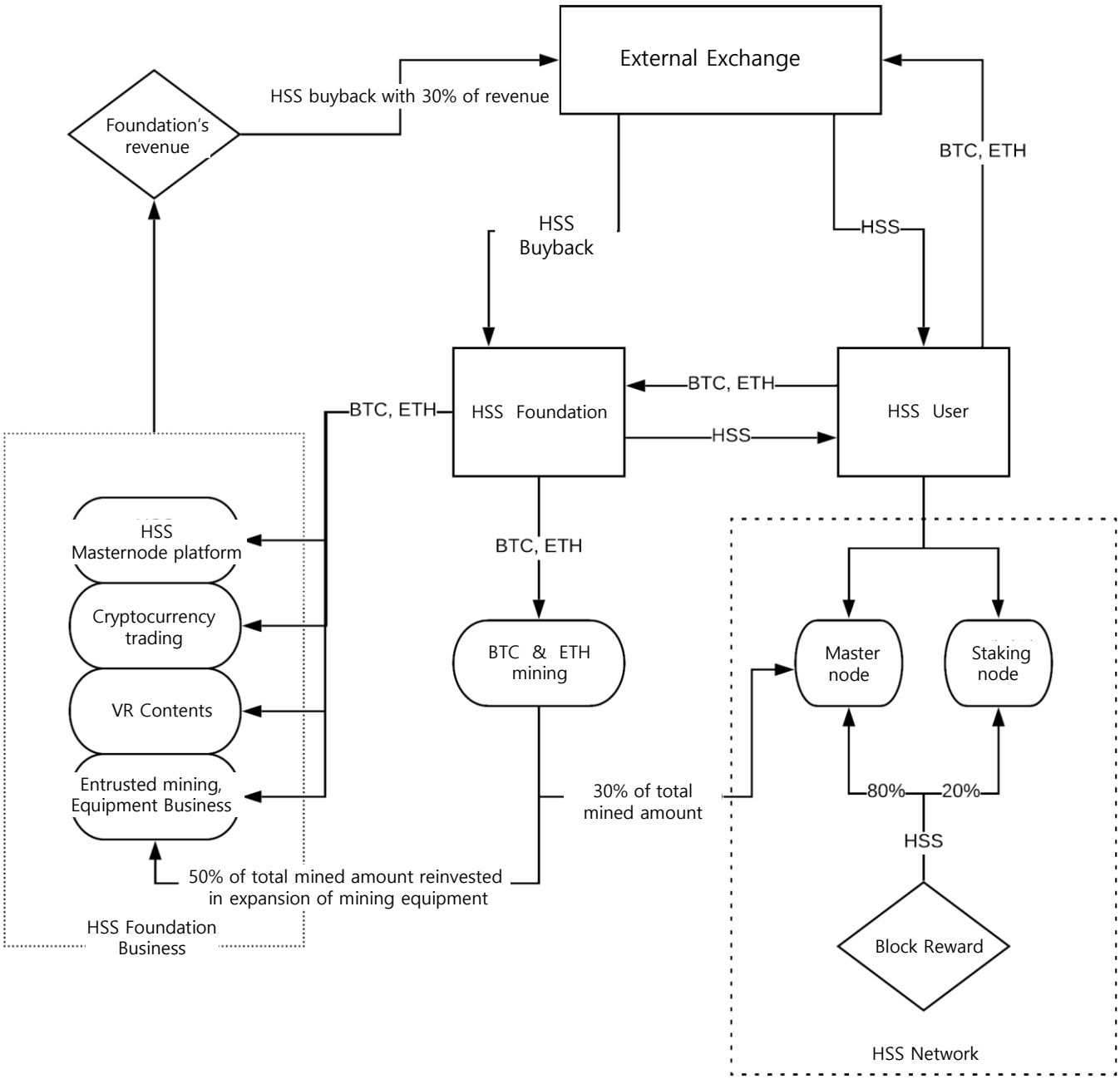
Token Allocation



- Sale (15,000,000 HSS)
- Reserve (25,000,000 HSS)
- Mining (160,000,000 HSS)

* 40,000,000 HSS have been premined.

HSS Flow Chart



*Note: HSS cannot be obtained from the foundation from the time HSS is listed on an external exchange.

12 Roadmap

- 2018 Q3 HashShare Coin Development Team setup, HashShare Platform plan, research, and design
- 2018 Q4 White paper draft, expand development teams and conduct beta tests
- 2019 Q1 Mainnet build and operation after completing the platform Masternode demonstration
- 2019 Q2 Publish White Paper 1.0, promoting and marketing HSS Coin/Platform
- 2019 Q3 MOU and agreement with domestic and overseas business partners
  Full-scale platform operation, user marketing and recruitment,
  HSS Coin listing on overseas exchange,
  start operation of mining center, prepare and sign a second mining center contract
- 2019 Q4 Start the mainnet upgrade and the secondary mining center
  Expand the HashShare Platform Portfolio
- 2020 Q1 AI trading demonstration
  Creating business opportunities with companies with VR technology
  Mining Pool building
- 2020 Q2 Increase HSS coin value by realizing buy-back with foundation's revenue

13 Partners

恒链软件科技有限公司

PLANETA

40 FORTY VR·AR·DRONE

KAZ MINERALS

Good Friend Solution G·F·S

BLJ LAWFIRM

14 Disclaimer

Disclaimer clause

Please read the following articles carefully before participating in an HSS Token Sale. The proceeds from an HSS Token Sale are used for the development described in this white paper. (Please note that the development of content and roadmap are not firm and may be changed in the future.) HSS Token is not a security and does not represent ownership of HSSshare. This white paper is not intended to attract investment and no one other than Hashshare can issue HSS Tokens to implement the plan described in the white paper. Please read the following notes carefully and participate if you agree.

1. You agree that an HSS Token does not constitute a security.
2. This white paper is not intended to attract investment.
3. You acknowledge that the content of this white paper does not represent only the benefits of HSS Token.
4. Citizens, residents, or permanent residents of countries with restrictions on token sales are not permitted to participate in an HSS Token Sale.
5. You agree that the information contained in this white paper and your current or future communications with anyone will not be construed as a guarantee of any form of interest or benefit.
6. You acknowledge that you may incur financial losses from unknown risks associated with cryptocurrencies, such as severe fluctuations in the value of cryptocurrencies and the inherent risks of the cryptocurrency industry. You understand these risks and agree that you will be able to accept the potential losses.
7. You acknowledge the risks associated with HSS Token, its business, and operations related to HSS.
8. You acknowledge that the development and roadmap of this white paper is not definitive and may change in the future.
9. You acknowledge that in sending you e-mail from time to time, the email notification will never require your information or reply. To reduce the possibility of fraud, phishing attempts, and other illegal activities by third parties, you agree not to respond directly to all emails related to HSS Token.
10. You agree that HSS does not warrant the duration of the Hashshare Ecosystem, and acknowledge that the HSS Ecosystem may be suspended for various reasons.
11. After participating in an HSS Token Sale, you become an HSS Token Holder, but it does not mean that you are a holder of any equity or other securities in Hashshare.
12. To participate in the HSS Token Sale, contributors must confirm the following:

1- Do you have the legal authority to receive HSS Tokens from the contributor's country?
2- Can you be fully responsible for receiving HSS Tokens and for all relevant restrictions and risks?
3 Do you understand the usage and relationship between Blockchain and cryptocurrency?