



Stipend

## Abstract

Nowadays, more and more companies are starting to hire people remotely for many different reasons - it's usually cheaper, easier and they have a bigger pool to pick great talents from. However, the sites that are currently used aren't using blockchain technology, from which they could benefit enormously. We believe that the future lies in the blockchain, and that Stipend will advance the vision of a decentralized platform for freelancers that will: (1) enable anyone to post an offer, (2) allow for an individual to apply for an offer without restrictions, and (3) automate the process of reviewing work through the use of a user "rating" scheme.

Perhaps the main downfall of many sites currently operating in the market is the use of incredibly high fees--some up to more than 20% percent before any payment processing fee is included. If a freelancer wants to get paid via credit/debit card for example, the fees are even higher because of additional anti-fraud checks that credit card companies have to make. PayPal fees also cut deeply into any paycheck and bank transfer--the cheapest of which can take up to a week to clear. Additionally, ensuring the work is done and the payment is made to the right address takes time and might be hard for the person to settle it. The entire process is inefficient and time consuming, limiting the scope and breadth of tasks that bidders can outsource to our platform to find the perfect worker.

Stipend will therefore be a all-in-one platform for all kind of task added during project lifetime. Instant payment as rewards, incentivized workers with coin reward schema throughout the platform. Teams will be able to easily and efficiently disperse payments to contributors who have fulfilled the requirements of any task using the coin they desire. Those using SPD will have no fees charged, while using any other coin supported to pay the job will be charged a small fee to be paid by the buyer. A verification process and reputation system will be built in to verify that each task was successfully completed before payment is dispersed, known as the "pre-user rating".

*Your success is our success*

## Stipend

Stipend is built off an advanced, hybrid Proof-of-Work (PoW), Proof-of-Stake (PoS), and Masternode (MN) system. The official abbreviation for the coin is SPD. The total supply will be 19,357,085 SPD. In regards to each block, there's about a 1.5 minutes combined target, with both 1.5 minutes for POS and POW. The advanced difficulty algorithm that the coin implements allows for retargeting every block, as well as time warp and instamining protection. The block reward is likely variable during the time life of the coin.

Below is a breakdown of the PoW/PoS/MN rewards over time:

Starting Block #	PoW Rewards	PoS Rewards	MN Rewards
Block #2	1 SPD	0 SPD	0 SPD
Block #101	5 SPD	0 SPD	0 SPD
Block #201	10 SPD	0 SPD	0 SPD
Block #301	15 SPD	0 SPD	0 SPD
Block #401	25 SPD	0 SPD	0 SPD
Block #1500	15 SPD	35 SPD	25 SPD
Block #210000	0 SPD	20 SPD	10 SPD
Block #420001	0 SPD	10 SPD	5 SPD
Block #630001	0 SPD	5 SPD	2.5 SPD
Block #850001	0 SPD	3 SPD	1.5 SPD

We decided to end the PoW system at the 210,000th block and use solely PoS and MNs to keep the network fully functioning. In the long term, this would allow Stipend to be eco-friendly coin by slowly declining the amount of electricity that is needed in order to keep it intact.

## Hashing Algorithms

Stipend is built off of the C11 algorithm. It is very similar to X11 as it uses 11 hashes, but in a different order. PoS hashing is made through SHA256d algorithm. Both of these algorithms, used in conjunction with one another, allow for increased security and stability throughout the Stipend network.

## Proof of Work / Proof of Stake

The Proof of Work (PoW) system, in regards to cryptocurrency, was first designed and built by Satoshi Nakamoto, the creator of Bitcoin. The idea inherently refers to a piece of data which is difficult to produce but yet simple for others to look at and verify, allowing for a network or individual to easily prove validity. In Bitcoin, the PoW system helps to ensure the security of the network through block mining. Each node currently deciding to participate in mining is required to go and solve a computationally difficult problem to ensure the new block's validity. The first successful node is allocated a reward.

The PoW system, as a whole, is fair throughout in the sense that a miner with  $p$  fraction of the total computational power can win the reward and create a block with the probability  $p$ . An individual contributing more computational power will earn the reward more often than an individual contributing less, in spite of the fact that luck plays a factor. Even so, there are some glaring flaws throughout. For one, 51% attacks are a real possibility.

The Proof of Stake (PoS) system, on the other hand, was first designed and implemented by Peercoin. The idea is simple—instead of mining power, the probability to create a block and receive the associated reward is proportional to the user's ownership stake. An individual stakeholder who has  $p$  fraction of the total number of coins in circulation creates a new block with  $p$  probability. The reasoning behind the protocol is that the users with the highest stake in the system would have the most interest overall to maintain a secure network. If the network is attacked, it stands to reason that they would have the most to lose. Also, the only way to mount a successful 51% attack on the network in a PoS system would be to acquire a 51% stake of the currency, which would be almost impossible or incredibly expensive for an up-and-coming currency.

In spite of all this, a PoS network does come with some vulnerabilities. Because of the fact that the network is not aware of anything except for the blockchain, there is nothing physical anchoring the blockchain in reality. As a result, there are many methods that can influence and harm the network. One specifically is called a "bribe" attack, in which the attacker performs a spending transaction he wants to reverse later, builds up a false chain after the transaction, and publishes it once it's longer than the valid chain, reversing the original transaction. Although this is possible on a PoW network, it's much cheaper and easier on one built solely from PoS.

Because of this, Stipend employs a hybrid network that includes both PoW and PoS components. This allows for it to enjoy both the benefits from each as well as the increased security that such a compound model possesses.

## Masternodes

A Masternode is simply a node that keeps a full copy of the blockchain in-real time. It is active 24/7, and is always interacting with other nodes to make a fully stable and performing decentralized network. Masternodes can:

- Increase transaction privacy
- Allow instant send
- Participate in governance/voting
- Enable budgeting and treasury system

Running a Masternode helps the network throughout, as there will always be a stable node, with multiple connections around the world, running. As a reward for hosting one of these Masternodes, SPD will be paid to your wallet on a recurrent basis.

## What do you Need to Run a Masternode?

- Collateral: 5,000 SPD
- A VPS or a server to host the wallet 24/7
- A dedicated IP address
- Some storage space to keep a copy of the blockchain

In order to ensure that the MN owner doesn't cheat or corrupt the system, a collateral becomes necessary, as the operator needs has something at stake in the environment. We decided to set this collateral as 5000 SPD, as computed with the total supply and blocks in the code.

## Allocation / Premine

Stipend currently is specified to only have 19,357,085 total coins. Of those, we took a premine of 2.5% (475,000SPD) to cover managerial and other issues relevant to the growth and development of the coin long-term as we believe to be necessary. It also includes 50,000 Stipend (10 x 5000 SPD) that will be auctioned off to run the first MasterNodes before block 1500.

## The Stipend Platform

Ways to find work, tasks, bounties, surveys or even offer them are split between multiple platforms/websites and have astronomically high fees. We believe that a decentralized, blockchain-based platform will be a great and more future-proof replacement. Because it relies on the blockchain, all transactions about job history, user ratings and things like that will be permanently written to the blockchain, helping to make this platform more transparent and open than anything that's out there right now.

Applications to find work, offer work, task, duties, bounties, survey, are split between multiple platforms and have huge fees that the website takes. We do think that a decentralized platform, run autonomously on the blockchain, will provide the users with the best experience to perform their business.

As we use the blockchain, all transactions and old duties will be written in the blockchain (user rating) and payments will be traceable for each person. These payments will be done almost immediately, so the user won't wait long to get paid. This is one of the major points we offer, as well as the plurality of tasks.

## How Will it Work?

Stipend plans to accommodate both the clients--those who want a task completed--and the freelancers--those with the wherewithal to complete that task. Work is a pretty wide term, and thus we expect to support all kind of tasks that can be exchanged for a monetary reward. Once the freelancer completes the job that has been assigned to him, he will receive his payment in a supported cryptocurrency.

The Stipend Platform aims to it easier for freelancers to meet clients and vice-versa on each of the following tasks. By task, we understand that there is a work to be done, and once the work is done, the issuer of this task will have to reward the worker that done the job and claimed the reward. We have split these tasks into multiple categories:

**1<sup>st</sup>. Individual tasks:** The bidder set a work-description, an user take the offer, therefore the offer is no longer available to other people. The bidder set a deadline for the work to be done, but it can be spoken between counterparties as a contact will be written.

**2<sup>nd</sup>. Individual tasks, but the bidder has the right to choose amongst appliers:** See the reference to the "Rating workers" section. Once selected, the offer is taken by the person and he got notified that he has x days to provide with the work.

**3<sup>rd</sup>. Pool tasks:** These tasks will mostly be used by companies or cryptocurrencies that will set an amount of coin in the task, that will need to fulfil requirements, and once one is done by someone, it is immediately paid upon validation from the issuer. The pool will be actualized instantly.

**4<sup>th</sup>. Collaborative tasks:** This one will be for projects submitted by somebody that need to set-up a team or a collaborative area for the job to be done. Rewards will be proportional to the commitment of the worker in the global task (difficulty, time-consuming, etc.)

Some examples of tasks could possibly be:

**1<sup>st</sup>. Marketing work:** There is a brand willing for more visibility. Anybody can tweet, write post, shill the company, and submit the work they did to the issuer. Therefore, the issue will reward the worker for the task depending on their rewarding scheme

**2<sup>nd</sup>. Surveys:** Please refer to "User Rating". Each user will be categorized, and therefore companies will be allowed to submit surveys for a pool of x people. Only the one that fit the profile the company wanted will see this task. Once submitted, the task-taker is paid immediately.

**3<sup>rd</sup>. Freelance/Dev Job:** These tasks are for people that want a programmer, a designer to do a certain task. Some examples include:

- **\*Web, Mobile & Software Dev** (Web, Desktop, E-commerce, Game, QA & Testing, Scripts & utilities, Wordpress building)
- **\*IT & Networking** (IT, ERP/CRM, Security, Database Admin)
- **\*Engineering & Architecture** (3D, Architecture, Contract, Product design)
- **\*Design & Creation** (Animation, Audio, Graphic, Logo, Photography, Video)
- **\*Writing** (Academic, Blog, Copywriting, Editing, Technical, Resume & Cover Letters)
- **\*Translation** (General, Legal, Medical, Technical, School)
- **\*Legal** (Contract Law, Corporate, Criminal, Intellectual property)
- **\*Accounting & Consulting** (Accounting, Financial, HR, Management)
- **\*Admin Support & Community Help** (Data Entry, Virtual Assistant, Transcription, Project Management, Web Research, Customer Service, Technical Support, Community Manager)
- **\*Sales & Marketing** (Sales, Advertising, Email, Strategy, SEM, SEO, SMM, Telemarketing & Social Networks)

## How Will SPD be Used?

We plan to support a multitude of different cryptocurrencies. However, if you instead choose to use SPD, you'll have an added benefit of 0% fees. Essentially, the platform will work with the coin. There are 2 ways of using this SPD:

1. Either you pay/receive the payment for the work/task/survey directly in SPD, and you pay 2% fee on this. This is best practice
2. Or you pay in a currency that will be supported by the app/platform (BTC,ETH, the list will be updated later on).

Each payment for a task/work not using our coin will be charged a little amount of fee for the transaction(fee that will be decided later on to cover structural / change fees). This will be deducted from the amount paid, or you will have to convert the amount to SPD before submitting the payment.

As SPD is going to be a currency to pay with, with fast transfers, and low transaction fees, as well as new anonymous features coming in Q3/Q4, the coin could be used for any other transaction in other places than the app/platform.

## Coin Reward Scheme

We believe that great work shouldn't go unrewarded and thus we came up with the idea to reward our top freelancers. Each freelancer on our platform will be assigned a Global Rating--work harder and impress your clients and you'll see your global rating increasing. Slack off with your work and it'll start to decline. As a result, if you're doing consistently good work over longer period of time you'll end up in the "Top Rated" bracket that comes with a multitude of rewards.

## User Rating

The idea of a user rating will be a key feature of our app. Both parties will be evaluated, and both the clients/bidders and workers/job takers, providing relevant information on a few different factors, namely:

### **Freelancer's rating**

Name - Global Rating: % ★★★★★☆

Number of task realized:

Average time consumed compared to the offer:

Location:

★★★★★ Skills

★★★★★ Quality of Work

★★★★★ Availability

★★★★★ Adherence to Schedule

★★★★★ Communication

★★★★★ Cooperation (if tasks are collective)

### **Client's rating**

Name - Global Rating: % ★★★★★☆

Number of task offered:

Average time consumed compared to the offer:

Location:

★★★★★ Skills

★★★★★ Quality of Work

★★★★★ Availability

★★★★★ Adherence to Schedule

★★★★★ Communication

★★★★★ Remuneration

## Community

- Twitter: <https://twitter.com/StipendOff/>
- Telegram: <https://t.me/StipendOfficial/>
- Discord: <https://discord.gg/Q6vyckx/>

## Conclusion

This paper proposes and outlines the entirety of the Stipend network as well as our plans to develop the next generation of freelancer platform through the usage of the blockchain. Each of the features and advantages of Stipend may be reworked. We have a



global vision of what we can offer with this application to freelancers that are tired of normal sites charging insane fees.