

# POW Whitepaper

22th September 2017

## POW wants to be the first global currency by leveraging both the Ethereum Blockchain and the social media networks

### Overview

POW is a standard ERC20 token on the Ethereum Blockchain with two innovations that make it unique:

1. POW 'lite' is the non-Blockchain version of POW. It is held in the POWtoken.com account and enables holders to make free transactions with one another. Ultimately POW 'lite' will be fungible with the ERC20 POW that exists on the Blockchain.
2. A global 'airdrop' of POW 'lite' to over 2 billion worldwide social media users, with the capacity to create the single most widely held currency on the planet.

### The 'POW Account' & POW 'lite'

Ethereum could change the world, but by the admission of its founder (Vitalik Buterin), the technology is not ready for mass market adoption. The Ethereum Blockchain can only handle 17 transactions a second which pales compared to the volumes achieved by services like PayPal and VISA. Beneath the surface there is work being done by the Ethereum team on initiatives such as POS and 'sharding', which should solve the problems of scalability and high transaction costs. In the meantime the 'POW Account' & POW 'lite' concept creates a hybrid centralised/Blockchain currency and payment system, which can be seen as a stepping stone to the ultimate goal of a decentralised financial system.

### The 'Airdrop'

The global 'Airdrop' of POW 'lite' is achieved by leveraging the OAuth validation and verification service provided by Facebook and Twitter. The 'Airdrop' will be preceded by a coordinated PR campaign orchestrated by London PR agency Dimoso. Any Facebook user over 18 years old with an account over 3 months old is eligible for a free POW 'lite' allocation, and simply needs to visit POWtoken.com and click on the 'Login with Facebook' button to get their allocation. 'Login with Twitter' will be added shortly after launch. The 'Airdrop' will give users a starting balance for making transactions.

### Rewarding Early Adopters

To create urgency, we've devised a simple algorithm which rewards early adopters with a larger number of POW 'lite' than late adopters.

Claimants are received on a 'first come most served' basis, starting at 09:00 PT on 3rd October 2017. The allocation of POW 'lite' for any user is simply calculated as 10 billion divided by the rank of a claimant. The first claimant will receive 10 billion POW 'lite' (10 billion divided by 1). After that the

algorithm ensures that the amount rapidly falls, so for instance, the 10<sup>th</sup> person to claim will receive 1 billion POW 'lite' (10 billion divided by 10), while the 100<sup>th</sup> person to claim will receive just 100 million POW 'lite' (10 billion divided by 100). This 'Airdrop' is open ended, meaning that it is possible that over 1 billion social media accounts could claim their allocations of POW 'lite'.

We hope that the PR campaign can communicate this in the mainstream media and creating an urgency or 'race' in order to maximise their POW 'lite' allocation.

#### **[Start of section updated 9<sup>th</sup> November 2017]**

On 9<sup>th</sup> November we made the decision to introduce a referral scheme, similar to the successful scheme operated by Coinbase and Paypal. This required us to halve the allocation of POW 'lite' being given to future claimants in order to create a pool of available POW 'lite' that could be paid to referrers. This resulted in a significant increase in the claim and referral rate.

The new algo for the allocation of POW 'lite' to claims after 9<sup>th</sup> November is:

$(10,000,000,000 / (\text{Number of users} * 2))$

#### **[End of section updated 9<sup>th</sup> November 2017]**

### **A Database Driven Centralised Payment System**

All details relating to transactions between holders of POW 'lite' are recorded on a MySQL database which has the capacity to record billions of records.

Utilising proven 'load balancing' software, used by some of the world's busiest websites, employing parallelism in our server configuration we will be able to manage spikes in user activity anticipated around the launch.

### **Decentralised Record Keeping and Trading**

What we gain in speed and capacity from a centralised server we lose in security, recoverability, privacy and 'trustlessness'. To mitigate these risks, every 10,000 transactions we take a 'hash' of the transaction log and upload to the Ethereum Blockchain. Furthermore, after a period of testing (estimated at 2 months) on the Ethereum TestNet, we will build a 'bridge' so that owners of POW 'lite' can transfer their holdings out of the POWtoken.com account and into the Ethereum Blockchain, making POW 'lite' fungible with the ERC20 POW.

### **Daily Reconciliation of POW 'lite' and ERC20 POW**

At the end of each day the amount of new POW 'lite' that has been claimed will be issued in POW ERC20 tokens to a single ETH address which we refer to as the nominee account. By this method the total supply of POW ERC20 will include all POW 'lite' claimed by Facebook users.

## **The Long Term Migration to 100% Decentralised**

This likely relies upon Ethereum reaching its Serenity release at some point over the next two years, with the anticipated benefits of POS and 'sharding'. At this time we would recreate the entire transaction history and record it on the Ethereum Blockchain before issuing all holders of POW 'lite' within the POWtoken.com account, a wallet which would hold their ERC20 POW on their own unique ETH address. At that point the POWtoken.com account service would have served its purpose as a stepping stone and could be retired.

## **Which Social Media Services Will be integrated?**

Initially we've exclusively integrated with Facebook, who have over 2 billion users globally. After launch we will start work on integrating the Instagram and Twitter who have approximately 700m and 300m active users respectively, and have similar APIs which allow 3<sup>rd</sup> party validation and verification in the same manner as Facebook. We will explore the possibility of integrating with a Chinese social media service in the future but do not believe is critical in the initial phase.

## **Who are the team behind POW?**

We're five seasoned professionals with collective expertise in Blockchain technology, traditional server driven web based solutions, AWS, finance and public relations. One member of the team, Simon Wajcenberg, with expertise in finance and public relations, has stepped forward to be the figurehead during the launch phase and will be appearing in mainstream media in the days before the launch.

We're not raising any money for the POW project and all funding has been from our own resources.

All Blockchain code will be made public on Github.

## **How are the POW team being rewarded?**

The founder team are receiving 19.3bn POW ERC20 tokens between them and key advisors prior to the launch. None of the founder team or any advisors have received or will receive any remuneration (salaries, options or expenses) from POWtoken.com or the UK limited company.

In terms of the percentage of total supply of POW that the founders allocation represents, when the full public allocation has been made the founders will collectively hold 6.83% of the total supply.

## **Ownership of the UK limited company**

The five founders each have a 20% stake in this UK limited company. The UK limited company is the deployer of the POW token, and is also the owner of the URL POWtoken.com. The limited company will cover the costs of the AWS servers on which the centralised POW 'lite' payment system operates. Although transactions are currently free, we may have to introduce small flat rate charges

on transactions to cover the server costs. Our modelling shows that the rates would likely never have to exceed 1 or 2 cents per transaction which is a fraction of that charged by Paypal and VISA.

### **Trading the POW ERC20 token**

The POW ERC20 token will be listed on the following public exchanges, known as the secondary market: EtherDelta.com & hitbtc.com

Listing on the exchanges allows other parties, possibly those who share our belief for an exciting future, to purchase POW in the secondary market.

On the basis of the eventual fungibility of POW 'lite' and the ERC20 POW, we will use the mid market price from EtherDelta.com to provide a USD equivalent value for holders of POW 'lite' which will enhance the user's experience and ease of use.

### **Appendix 1 – A per User valuation model for POW**

We look at the “per user” valuations of the largest crypto-currencies and crypt-assets and use it to model the potential value of POW.

#### **How many users do Crypto-Currencies have, and what is the per user value?**

The two largest Crypto-Currencies are Bitcoin & Ethereum.

If you divide the value of all Bitcoins by the number of holders, its equals \$4,467.

If you do the same for Ethereum you get \$18,667 per user.

The average of the two is \$11,567 per user.

#### **Cryptocurrency Per User Valuations**

	Number of users*	Market Cap (USD)	Value Per User (USD)
Ethereum	1,500,000	28,000,000,000	18,667
Bitcoin	15,000,000	67,000,000,000	4,467
Average			11,567

\* These are estimates based on the number of addresses in existence.

#### **How many users do Ethereum Crypto-Assets have, and what is the per user value?**

The five largest Ethereum Crypto-Assets are OMG, QTUM, EOS, BAT & GNT.

If you divide the total value of these assets by their respective users, it gives an average value per user of \$7,946.

### Ethereum 'Asset' Per User Valuations (Largest five by market cap)

	Number of users**	Market Cap (USD)	Value Per User (USD)
OMG	291,058	1,100,000,000	3,779
QTUM	33,327	553,000,000	16,593
EOS	82,976	245,000,000	2,953
BAT	18,737	238,000,000	12,702
GNT	62,966	233,000,000	3,700
Average			7,946

\*\* These are estimates based on the number of token holders as per etherscan.io.

### What does the analysis suggest is the value of a POW?

Using the data from the largest two Crypto-Currencies, and the largest 5 Ethereum Crypto-Assets, the average per user value would be d be \$9,756. To be conservative we assume a figure of just \$3,000 per user.

The table below summarises the results, and shows that if POW gains 1billion users, the lucky claimant #1 will become the richest person on the planet with \$125b in wealth!

### POW valuations implied by current values of Crypto-Currencies and Crypto-Assets

Number of POW Users	Per User Value (USD)	Implied Market Cap. (USD)	Total Amount of Issued POW	USD Value of 1 POW	USD Value of 10b POW
10,000	3,000	30,000,000	125,675,685,297	0.00024	2,387,097
100,000	3,000	300,000,000	148,701,536,227	0.002	20,174,640
1,000,000	3,000	3,000,000,000	171,727,387,157	0.017	174,695,490
10,000,000	3,000	30,000,000,000	194,753,238,087	0.15	1,540,410,845
100,000,000	3,000	300,000,000,000	217,779,089,017	1.38	13,775,427,262
1,000,000,000	3,000	3,000,000,000,000	240,804,939,946	12.46	124,582,161,839