

CycloShieldCoin

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Abstract

CycloShieldCoin (CYS) is a cryptocurrency accompanied by a real world gadget, an app and potentially huge customer base. This coin is our take on the growing market of cyclists by providing them with a means of payment, reward system and bringing the concept of cryptocurrency to a more general audience of users. Built upon the foundation of Ethereum, users of the existing Ethereum cryptocurrency will not face difficulty in adopting CYS and newcomers to cryptocurrency will find plenty of educational resources.

Our physical gadget CycloShield Nano is the evolved version of CycloShield which debuted on Kickstarter, the former version did not meet its hefty funding goal; however, we listened to the community and are ready to present a superior product. The new version is smaller, lighter and cheaper. We have added new features such as a panoramic video recorder.

Cyclists, regardless of being professional sportspeople or commuters, spend a high deal of time on the road. By minting CYS we will bolster healthy activity and information exchange across cyclists, rewarding their efforts with CYSs and offering value to advertisers which could cater to our user-base at a discounted price when they pay for ads with CYS. This coin is a token implemented on the Ethereum network as an ERC20 compatible token. CYS will have intrinsic value because it rewards users for their athletic achievements, can be used as a payment method on our store, a payment method to third parties (other people). CYS on our store can be used to purchase the physical gadget, advertisements on our platform and other real-world services.

1 Introduction

Cyclists are an ample group and on the rise. There is a great demand for high-tech gadgets and cyclists, ranging from professionals to commuters, desire to invest in their own safety. There are multitude of passive safety gadgets, however, the most part of safety is on prevention (such as lights or high visibility clothing). Our goal is to remunerate cyclists for information about the most suitable routes and real time information (accidents, obstacles, retentions) that could catch others unprepared.

By using the blockchain, it is possible to ensure the transparency of our payment system as well as granting users complete liberty to exchange CYSS without the need for any intermediaries, CycloShield LTD or others.

Providing our users with our own token will open up a wide variety of options to pay them for their contributions. In this document, we will discuss the concept of the CycloShield Nano and CYS, monetary characteristics, token allocation and the different stages in our roadmap

CYS is the token for road safety, sports activity and real time road information collection.

2 Concept

The physical product and cryptocurrency token offer real life use cases and the assurances of a traceable project. The physical product is a safety gadget for cyclists that we already presented on Kickstarter in 2016. The 2016 version of the gadget could detect accidents and falls, send automated SOS calls to the emergency systems containing the position of the cyclist, record vehicles violating the security perimeter and act as a road assistant. However, this is an improved version of the previous gadget which is smaller, lighter, cheaper, with better led rear lights. Even with the improvements of the device, it will be much cheaper and even include better features such as a panoramic video recording (covering rear and sides of the cyclist) and ultrasonic dog repeller.

CycloShield Nano is used in conjunction with our official App (Currently in beta, where will integrate CYS), in addition to the aforementioned, it has maps, mirror view so the cyclist can see what the device's cameras are seeing and data collection from the many sensors.

Photo of the original CycloShield presented on Kickstarter.com



Figure 1:

After a few months of gathering feedback and hard work, we redesigned it from scratch. The code for both the gadget and the app are brand new; the electronics has been miniaturised and made more energy efficient.

The Cycloshield Nano, the evolution



Figure 2:

The rate of cyclist accidents in some of our larger markets is alarming, therefore, the passive defence and active SOS our device provides covers a real market need.

High purchasing power cities are among our targets

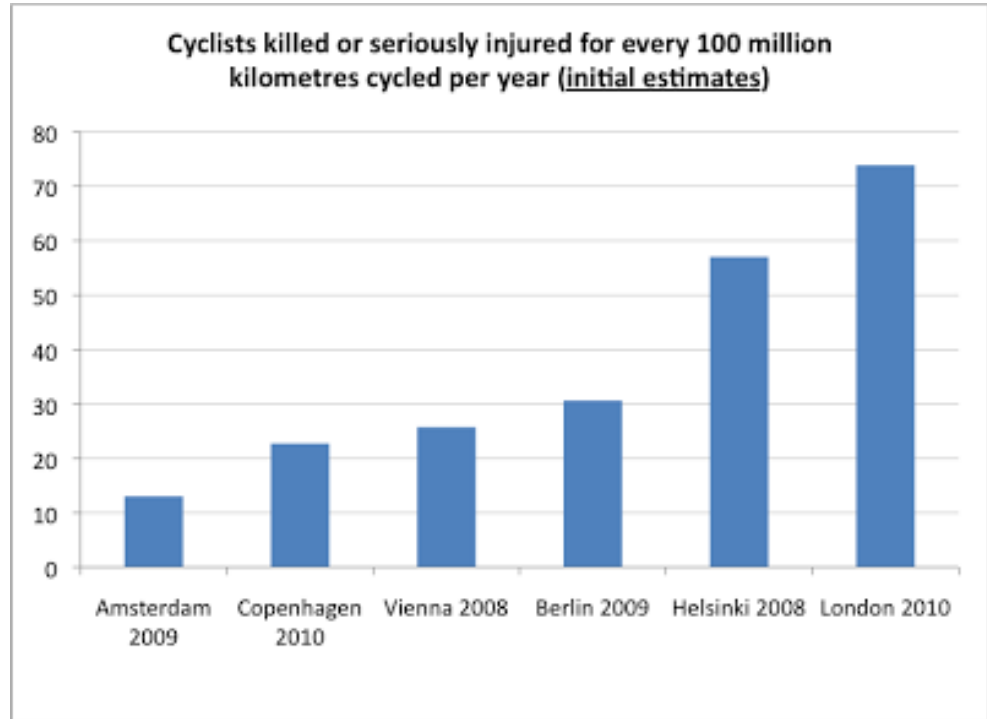


Figure 3:

Additionally, there is a new business model that is getting traction both state sponsored and by the private initiative: bike-sharing. Bike-sharing is an emerging market which growing very quickly. We will look for strategic partnerships with countries, cities and companies so that their bicycles can have a CycloShield Nano fitted as standard equipment.

“A CycloShield Nano in every bike and a coin that save lives.”

There is big potential for commercial synergies with bike-sharing companies

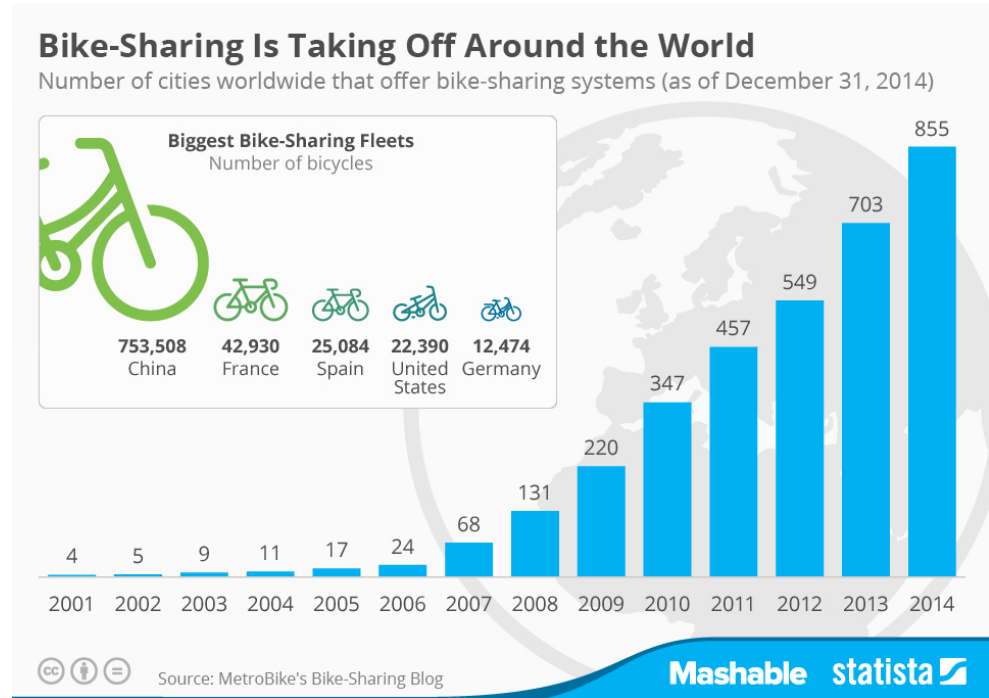


Figure 4:

The CYS token will not be limited to owners of CycloShield Nano, any person with a Ethereum compatible wallet (or the right browser plugin such as MetaMask) will be able to use it.

3 Monetary Characteristics

The creation of the monetary mass will be fixed and final as per the ICO. The total number of tokens will be 1×10^9 (final supply of 1 billion). The token will implement the ERC-20 standard, this will make it familiar and easy to use to the average user of cryptocurrencies but we will not limit its reach, we will work on raising awareness of this token in the cycling world because every CycloShield Nano will come preloaded with a wallet, promoting adoption and bringing this technology to those less tech-savvy

With regards to the implementation, CYS will be ERC-20 compatible with a fixed supply set on the creation of the cryptocurrency.

```
//Only a billion will be created as per this pseudocode
uint256 _fixedTotalSupply = 1000000000;
function totalSupply() constant returns (uint256 totalSupply) {
    totalSupply = _fixedTotalSupply;
}
```

4 Business Model

The CYS token could be used as payment method for a variety of tasks from final users to advertisers as depicted in the following subsections.

4.1 Value proposition for final users:

First and foremost, the end user, which are the core of our business, will use CYS a payment system. Our platform both offers data collection that can be rewarded with our token and in-app buys such as premium routes, road information, accident blackspots, etc. The system collects real time information about roads with the worst behaved drivers (those that violate the safety perimeter of the cyclists) and every accident detected by our system. By having this information, our users can decide to avoid particularly dangerous roads.

The CycloShield Nano itself could also be bought on our store paying in CYS, this gives users the chance of buying them with the work they do for the community by creating valuable content.

So to recap this section:

- In-App, pay per premium routes created by users of the app (enabling mutual benefit among final users à la p2p)
- Pay per the CycloShield Nano device itself on our online store without a need for fiat currencies

4.2 Value proposition for token buyers:

Investors in this token will also find that there is a commercial incentive for partners and advertisers in buying CYS. Advertisement is a huge market, targeting the right customers is not only hard, it is expensive. By providing a platform used by cyclists, companies will have it easy to tap into this customer base. However, there is more. They will obtain a better value for money when they pay in CYS to place ads on our app and website. We believe this will be enough incentive for buying CYS, we will also provide them with guidance of where and how to buy them.

- The app will show highly targeted non-invasive ads, advertisers will be able to feature their ads by paying using CYS. The users our device are cyclists with purchasing power and proven tendency to invest in gadgets and apps that will benefit them in their sporting activity/commute
- We will work towards making commercial agreements with other brands so that CYS can obtain discounts and other perks when paying with the token
- We will do everything in our power to get this token listed on the main exchanges

According to studies, one in every three Americans ride a bike, over 100 million bicycles are manufactured every year around the world and 2.5 billion people have a bike worldwide. We are aiming at a massive market. The low cost of the CycloShield Nano will make it affordable to the entire first world and many developing countries, this will enable our user generated content routes to have a high demand, specially in places with many transient cyclists such as vacation places or places with traditionally attractive paths. One of the design goals of this token is to facilitate trade among final users, regardless of having the gadget.

However, the study also found that 48 percent of U.S. adults do not have access to a bike at home, and 52 percent worry about being hit by a car while riding. This is an indication of a high demand for our device (payable with tokens) and for the information provided by our app (freemium with in-app buys)

The app will show non invasive ads for both owners of the gadget and for freemium users of the app (that is, users with the app but not the device). This kind of segmented advertisements that are certainly willing to spend on technology and information means that the CPC/CPA (Cost Per Click/Cost Per Action) will be in line with highly specialised niches. Since we will offer discounts to companies advertising on our platform when they pay with our token, they will have an incentive to buy and use it.

Another business line we will work on is signing partnerships and strategic alliances with fashion, equipment, supplements, high performance sport centres, etc to offer token owner advantages when they pay for items or for services when they use CYS to pay.

Our team will concentrate efforts in having the token listed on the main exchanges but in the meantime, it will be available on decentralised markets such as EtherDelta and OasisDEX.

5 ICO Characteristics

The ICO will take place on the date to be announced on our web. It will be carried out by an intermediary that will hold funds in escrow, this way we will be only allowed to obtain the funds if the ICO reaches the minimum, being the equivalent to 200000\$ in Ethereum (1000ETH). This is the bare minimum necessary to fund this new version of CycloShield Nano and to implement the use of the token as explained in 4.1 and 4.2

In addition, there will be a hard cap equivalent to 10000000\$ (Ten million) or 50000ETH. The ICO will last until reaching this hard cap or exhausting the time limit, whatever happens first. If the minimum goal is not reached on completion on the ICO period, collected funds will be returned to ICO participants bar the cost of the transactions themselves (gas and/or fees)

6 Intended Revenue Use

Out of the totality of collected funds, CycloShield LTD will use them in the following fashion, naturally there could be changes during the course of the project as the business world is a dynamic environment and we would have to make new strategic decisions.

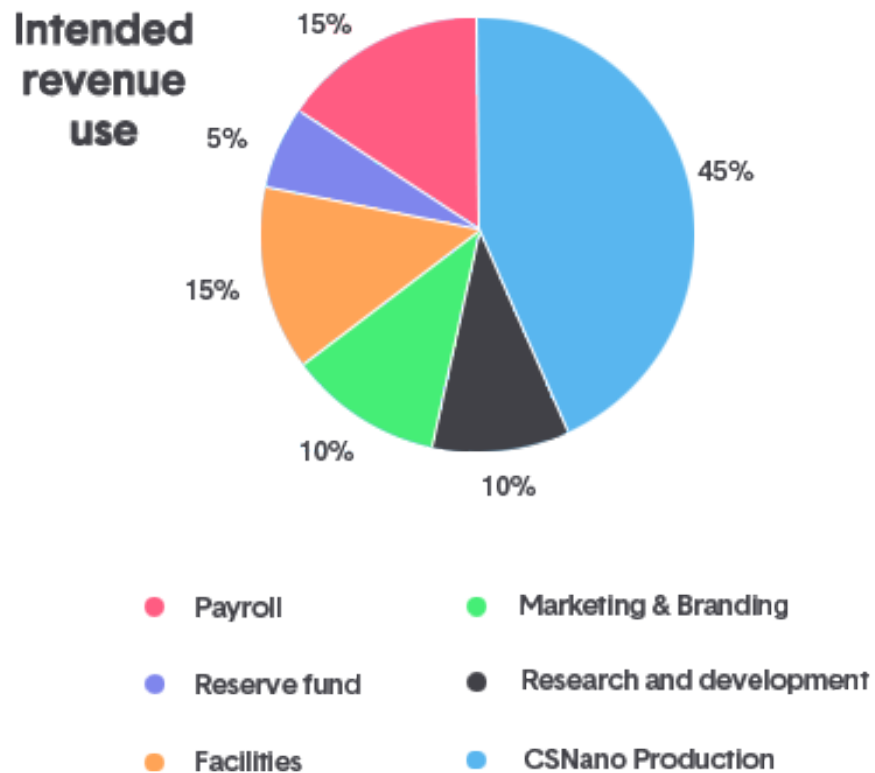


Figure 5:

Intended revenue use:

- CSNano Production 45%
- Research and Development 10%
- Marketing 10%
- Facilities 15%
- Reserve fund 5%

- Payroll 15%

The distribution will be the same irrespective of what amount is collected on the ICO, always subject to having met the minimum of 1000ETH

7 Token allocation

1×10^9 tokens (1 billion) will be created on completing the ICO. These will be distributed as follows:

Funds Allocation:

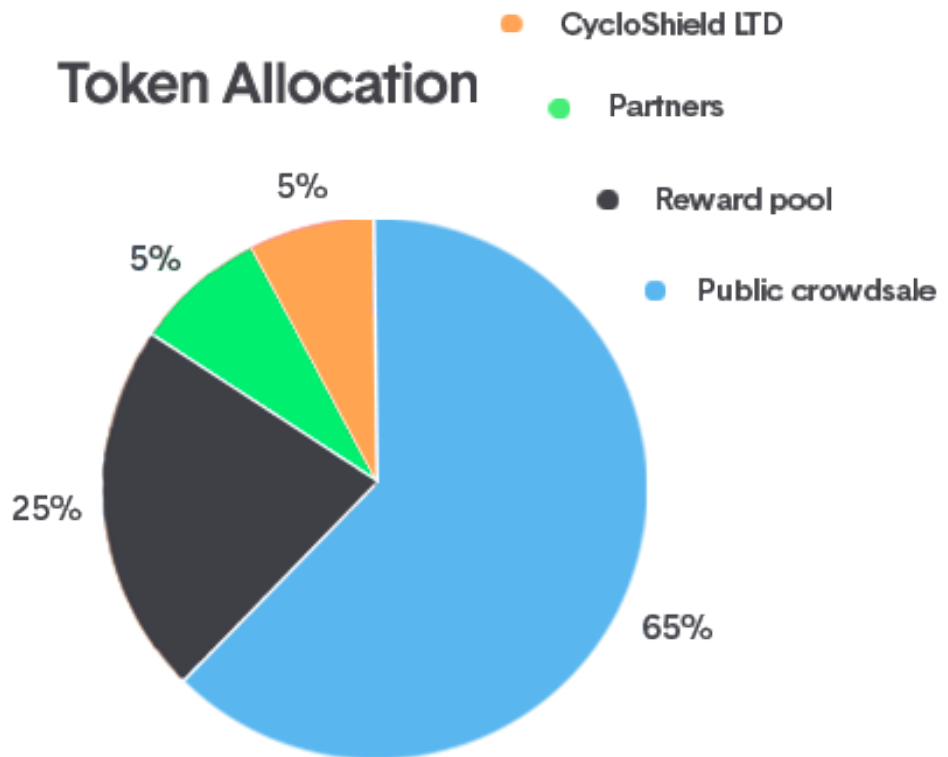


Figure 6:

- Public crowdsale investors 65%
- Reward pool 25%
- Partners 5%

- CyclosShield LTD 5%

The Reward Pool will play an important part in our vision, being used partly for marketing purposes such as rewarding users for their actions.

The tokens in our possession will be safely stored in a multi-sig wallet and with the majority of them in cold storage, keeping them safe from theft that could cause panic selloffs or a hacker getting hold of them and dumping the market at once. We also commit to not sell them in any harmful way to its market value.

References

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