

PROOF OF REVIEW



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NOTE FROM POR TEAM

Proof of Review is a review service for crypto projects and their development teams. A POR review requires verification and correlates to the level of information provided and identity verification the developer is willing to provide. Our system is designed to help build trust and transparency between the cryptocurrency community and developers.

This report is not intended as financial advice and should not be taken as such. This review has been completed as a paid transaction by the listed applicant and has been published with consent of the applicant and their wider team.

Whilst we do work closely with the applicant during the review process, our commentary is non-negotiable and all reports are final at the date of publication. The applicant is shown a draft copy prior to publishing however only factually incorrect information is amended at this point.

This review of "PIRL" has been reviewed in accordance with the criteria for **Tier 3** verification. See our website for more information on our verification process.

This review was compiled and is accurate as of 23rd November 2018. All references used to compile this report can be found on the last page.

TIER 1

REQUIREMENTS

- First and last name
- Email address verification
- Phone number verification via SMS
- GitHub repository submission
- Mandatory whitepaper submission
- Mandatory roadmap submission

TIER 2

REQUIREMENTS

All Tier 1 criteria is met

Social media verification

Website verification

TIER 3

RECHIREMENTS

All Tier 1 and Tier 2 criteria is met

Government issued ID verification





PROJECT INFORMATION

APPLICANT	Julien du Bois
APPLICANT JOB TITLE	CEO
APPLICANT COUNTRY OF RESIDENCE	Belgium
GOVERNMENT ISSUED IDENTIFICATION	Verified by Proof of Review
APPLICANT EMAIL	Verified by Proof of Review
APPLICANT PHONE	Verified by Proof of Review
VERIFICATION TIER COMPLETED	Tier 3
NAME OF CRYPTOCURRENCY	PIRL
COIN TYPE	PoW
LAUNCH TYPE	No premine, no ICO
TICKER SYMBOL	PIRL
ANN THREAD	https://bitcointalk.org/index.php?topic=2120193
WHITEPAPER	https://www.proofofreview.com/wp- content/uploads/2018/10/PIRL-Wpaper-25th- October-2018.pdf
ROADMAP	https://www.proofofreview.com/wp- content/uploads/2018/10/PIRL-Roadmap-25th- October-2018.pdf
SOURCE CODE REPOSITORY	https://git.PIRL.io depreciated: https://github.com/PIRL



FUNDAMENTAL ANALYSIS

ABOUT

PIRL is an Ethereum fork that launched in June 2017 with a focus on fuelling real-world usage by DApps. The reference node implementation is called "masternode", but is very different from the technology with the same name as implemented in DASH and PIVX.

Since then the project has evolved to become a lot more ambitious with its targets and has grown very quickly in the space during the last 12 months. The project recently suffered from a 51% attack and to counter this a recent hard fork introduced a penalty system, notary contracts and monitoring via Poseidon. These changes make PIRL one of the most 51% attack resistant projects on the current market.

They are are one of the first projects to introduce Notary Contracts/Nodes into their network. Notary nodes make a backup of the existing blockchain to another blockchain; in this case the Ethereum blockchain. The logic being that you would need to take over the Ethereum blockchain to be able to double spend following a 51% attack. Notary Nodes/Contracts are a easy way to deploy 51% attack protection and as such we would expect this technology to get better over time and be more widely used.

SCOPE OF USE

The project is now in the process of evolving to become a platform for use in the real world and to encourage adoption of its services. The Poseidon platform was launched in the summer of 2018 with a view to bring all decentralised applications DApps that could be provided via the network in the future into one web based interface. Which can be viewed here https://poseidon.PIRL.io/ also doubling as a block explorer.

The initial deployment of DApps in the crypto space has been slow and cumbersome with no real market penetration or anything close that could lead to signs of mass adoption in the near future. They are severely limited in their utility because they only support the transfer and processing of text data with a reliance on centralized storage for DApps data - which defeats the objective of being decentralised.

When faced with this problem one of the teams solutions is to use the IPFS network for storage and also for use as a content delivery network CDN. The IPFS protocol is a truly decentralised peer 2 peer technology that can provide an immutable and secure solution for the deployment of DApps with the ability to scale globally to a large number of users. IPFS Is currently being used successfully by active projects such as BitTube and future projects such as FILECOIN are planning to use it as a backbone. We envision a lot of projects will embrace the IPFS network for file storage/CDN and expect this to be a key buzzword in the crypto space in 2019.



FUNDAMENTAL ANALYSIS (cont.)

The PIRL blockchain will be used to run smart contracts. User interfaces and online decentralized features that are developed to be executed via nodes to avoid any single point of failure or control by large cloud providers.

The roadmap aims to provide the following services via the PIRL network in the near future:

- Decentralized storage
- Encrypted peer 2 peer communication
- Live streaming
- Video sharing
- Escrow protected trading
- Decentralized marketplace similar to eBay
- PIRLTube which provides a video sharing platform is already live

The PIRL currency will be used to provide payment for these services.

The developers aim to implement a multi-tiered masternode network which will lay the foundation for this process. This is the evolution of being the first masternode project on an Ethereum clone. Premium Nodes will help secure the network and provide notary function to protect against a 51% attack. The collateral is 20,000 PIRL.

Storage Nodes will provide the basis for a decentralised storage network via IPFS very much similar to Dropbox or similar services. The collateral is 10,000 PIRL.

Content Nodes will help deliver media content such as live streams and videos via IPFS and are already active and working on the PIRLTube platform. Collateral is 10,000 PIRL.

Running nodes requires the rental of a Virtual Private Server but with the use of the Poseidon platform the setup of masternodes is a one click solution, so even those with very limited technical knowledge and no experience of setting up masternodes can be up and running very quickly with just a matter of clicks.

TEAM

There are currently 18 team members and they are all non-office based, working remotely. The team, their roles and their Discord usernames are shown below. All team details are listed at https://PIRL.io/en/team.



FUNDAMENTAL ANALYSIS (cont.)

- Julain Du Bois (@masterdubs) Lead Developer/Founder
- **Julian Franken** (@cryptoduke) Chief Customer Officer
- Chris Bischoff (@chris) Lead Developer
- **Ryan Williams** (@ryanw) Community Manager/Writer
- **Brian Bowen** (@phatblinkie) Community Manager
- **George Delkos** (@0x1337) Developer
- **Alex Trottier** (@postfix) Developer
- Radostin Minchev (@fawkes) Community Manager/Writer
- **Wiliam** (@socal) Public Relations Manager
- **Iskra Nicolova** (@is) Developer
- **Maxmilian Breitmar** (m4x) UI/UX Developer
- **Alex Cosa** (@busminer) Community Manager
- Kousuke Tominaga (@kooz) Community Manager/Translator
- **Seo Dong Chan** (@masterseo) Korean Community Manager
- **Jeon Young Deok** (@jobmoses) Korean Market Research Advisor
- Topmike (@topmike) Korea Community Tech Advisor
- Lee Won Pyo (@mr.flowers) Korean Community Marketing
- Lee Joo Seong Designer/Promoter & Korea Community Web Design/Advisor

FINANCIALS

There was no premine or ICO. The project is funded by a developer fee implemented into the block rewards which currently stands at 10% per block.

DISTRIBUTION OF COINS

There is no available rich list to indicate the distribution of coins at the time of the review.

EXCHANGE LISTINGS

PIRL is currently listed at the following exchanges:

- Cryptopia
- Stex
- Btc-Alpha
- SistemKoin



FUNDAMENTAL ANALYSIS (cont.)

INTANGIBLES

PIRL recently had a 51% attack against its network around the 14th October 2018 (more information can be found here:

https://medium.com/PIRL/status-update-51-attack-hulk-2bf56e181d68.

The development team were proactive in responding to this and to resolve the issue they introduced PIRLGuard (more information can be found here:

https://medium.com/PIRL/PIRLguard-innovative-solution-against-51-attacks-87dd45aa1109.



COIN INFORMATION

PIRL is built using the Ethereum codebase and uses the same PoW algorithm. For this reason, PIRL can be mined with the same hardware including the ASICs but the risk of 51% attack is negated by using the notary nodes network.

The network has a blocktime of 13 seconds per block and the block reward is currently 10 PIRL per block. The block reward is currently split as, 6 PIRL to miners, 3 PIRL to masternode operators and 1 PIRL to the development Fund

The coin has a max total supply of 156,306,732 PIRL with roughly 26,828,978 PIRL available today. PIRL has great support from miners and pools because of the small differences to mine it compared to Ethereum.

There are currently 611 PIRL masternodes on the network at the time of writing. The required collateral per masternode is 20,000 PIRL, meaning a total of 12,220,000 PIRL are currently locked in masternodes or around 45% of the current coin supply.

With both GPU miners and ASICs available, the current global hashrate of roughly 216 GH/s is spread over 5+ big pools with 1000+ active miners overall. This number is likely to increase with future adoption.

There is hardware wallet support (Trezor and Ledger) for PIRL.

EMISSION STRUCTURE

The block rewards are the sole creation events for PIRL coins, being distributed to both the miner and the masternode operators for the PIRL network. Controlling and restricting the block rewards themselves is the most effective method of avoiding a high rate of inflation.

As the popularity of PIRL increases over time, the size of the block reward will be reduced, decreasing the supply of newly issued coins until the Max Supply Cap is reached. Every two million blocks, the reward will be decreased until reaching the Max Supply Cap of 156,306,732.71 PIRL coins.

Starting with block 2,000,000 the block reward will also be reallocated, this will even out the coins issued between masternode operators and miners.



COIN INFORMATION (cont.)

COIN ALGORITHIM The hashing algorithm	Dagger Hashimoto
PREMINE A predetermined block reward amount written into the code by the developer, usually released on block 1,	0%
ONGOING DEVELOPMENT FEE An ongoing block reward paid to the development team towards funding for the project,	10%
EMISSION STRUCTURE The amount of coins distributed over a set period of time,	Full emission structure can be seen here: https://PIRL.io/en/monetary-policy/
BOUNTIES & AIRDROPS Coins or tokens given away by the developer to the community either for a service or for participation in the project.	None. Published on social media when available.
COIN SUPPLY The total supply of coins,	26,828,978 PIRL
MAX COIN SUPPLY The maximum supply of coins.	156,306,732 PIRL
BLOCK EXPLORER	https://poseidon.PIRL.io/explorer/ https://devexplorer.PIRL.io



SOURCE CODE REVIEW

We look to confirm that the coin specifications provided by the applicant are parallel throughout their code (e.g., block/staking/masternode rewards are correct, no hidden premine, etc). We may also pass comment on the frequency of updates, commit history and responsiveness to queries.

PROJECT CODE REPOSITORY	https://git.PIRL.io/community/nautilus
LATEST RELEASE BINARY VERSION	v0.9.2
LATEST RELEASE BINARY DATE	17 th November 2018
LATEST RELEASE BINARY URL	https://github.com/PIRL/nautilus/releases/tag /0.9.2

Specifications match in the code and no premine is listed or no hidden premine detected.

The codebase is based on Ethereum as upstream. Developments in Monero have been merged on a regular basis in the past.

PIRL is a PoW coin and was recently vulnerable to a 51% attack (see Intangibles on pg.8).

Activity on the GitHub account shows constant development work around the project and contributors match with team members listed.

The codebase seems to be under active development and is based on Ethereum as upstream.

The sources are currently being worked on heavily since a recent move from GitHub to GitLab.

Build instructions have been partially adapted from Ethereum and are available for all relevant platforms and recent operating system versions.

There is CI/CD configuration, but it's not clear if this is a GitHub leftover that has yet to be migrated. Documentation could be a little more organised.



ANTIVIRUS TESTING

Proof of Review have reviewed the latest binaries available. We then pass these binaries through an antivirus checking tool and the results are provided below.

RELEASE BINARY TEST DATE	23 rd November 2018
RELEASE BINARY TEST VERSION	v0.9.2
WINDOWS TEST REPORT	https://bit.ly/2Acmrdi
MAC TEST REPORT	https://bit.ly/2AdKgBG
LINUX TEST REPORT	https://bit.ly/2PSEKyX

The current release binaries v0.9.2 were submitted to *https://www.hybridanalysis.com/* for evaluation and no issues or threats were detected.

While the listed virus detection website provides a quick way to validate how a number of antivirus engines view a particular file or URL, never take the result as definite state if a submission is malicious or not. Virus signatures and engines change regularly. So even if a particular engine doesn't detect something when we submit the binary, it may detect something later. Additionally, virus writers continuously implement new methods of obfuscation. HybridAnalysis is not a substitute for any antivirus or security software installed locally.



WHITEPAPER SUBMISSION

A whitepaper is submitted so that we can store a copy on our servers to reference for this review. It is important that readers see the document as it was at the time of review and unless hosted on our site, external links may change and render our reviews inaccurate.

WHITEPAPER LINK	https://www.proofofreview.com/wp- content/uploads/2018/10/PIRL-Wpaper-25th- October-2018.pdf
WHITEPAPER SUBMISSION DATE	25 th October 2018
PLAGIARISM TEST RESULTS	Passed. No indication of plagiarism.

The whitepaper clearly explains the project objectives.

ROADMAP SUBMISSION

A roadmap is submitted so that we can store a copy on our servers to reference for this review. It is important that readers see the document as it was at the time of review and unless hosted on our site, external links may change and render our reviews inaccurate.

ROADMAP LINK	https://www.proofofreview.com/wp- content/uploads/2018/10/PIRL-Roadmap-25th- October-2018.pdf
ROADMAP SUBMISSION DATE	25 th October 2018

PIRL has a clear and concise roadmap listed on their website.

The team is active in updating new and previous roadmap objectives and discussing this with their community via a weekly roundtable in their Discord.

Every Saturday at 1600UTC they hold a round table via the Discord channel where the vast majority of the time all the senior management is present to discuss updates and take questions from the community. These round tables are a very good opportunity to reach out directly to the team for any questions you may have and have them answered by the right people. Videos of all past round tables can be found in the YouTube Channel here https://www.youtube.com/channel/UCkBk5T62-fBr5Ev HZica-A.



SOCIAL MEDIA REVIEW

This social media review has been conducted as of 29th October 2018.

DISCORD

DISCORD - URL	https://discord.gg/z4faFxD
DISCORD - ADMINS	10
DISCORD - MEMBERS	4,493
DISCORD - ESCROW	-

TWITTER

TWITTER - HANDLE	@PIRLOfficial
TWITTER - ACCOUNT AGE	410 days
TWITTER - TWEETS PER DAY	1.53

OTHER

The following social links have not been checked or reviewed however have been provided by the applicant listed on page 3.

Reddit - https://www.reddit.com/r/PIRL/

Medium - https://medium.com/PIRL

YouTube - https://www.youtube.com/channel/UCkBk5T62-fBr5Ev_HZjca-A



WEBSITE REVIEW

WEBSITE URL https://PIRL.io/

The domain listed above was first created on 3rd September 2009. The latest website update was made on 23rd October 2018.

The WHOIS data for this domain has been obscured from public view. This is normal practice for many companies however we are therefore unable to verify ownership of this domain.

DEVELOPER PITCH

This section we have given the applicant the opportunity to promote their project directly to our users. We encourage each applicant to be personable and honest. Proof of Review have made no changes to this information other than correcting spelling and grammar to conform with British English standards.

PIRL is a blockchain implementation that strives to improve the accessibility of cryptocurrency and its related technologies; spurring an evolution of the crypto space through research, innovation, and dedication.

The leading problem facing digital currencies is that people lack the technical knowledge to take advantage of them. PIRLs goals are centered around the idea of the Poseidon platform, a place which simplifies the process, and creates a more intuitive experience for everyone.

In order to achieve this, and prepare for mass adoption, PIRL will take the existing framework of the Ethereum network, and further enhance its capabilities, scalability, and stability. A multi-tiered masternode network will lay the foundation for this process, bringing the concepts of decentralized currency, applications, and governance to a higher echelon.

PIRL Masternode Networks:

Masternodes on PIRL network secure the network, enhance stability and service unique functionalities.

PIRL Masternodes provide various services to complete the network infrastructure by providing 3 services - Security, Immutable Content and Decentralized Storage.



DEVELOPER PITCH (cont.)

Hosting a masternode will generate additional PIRL for its owner. The yield will vary due to the current count of masternodes on the network and the amount of time the masternodes stays online daily. Anybody can run a masternode!

PIRL Decentralized Applications:

PIRLApp is the All-In-One platform which fuses together the PIRL universe and delivers it in your hands. Your complete PIRL experience will be available on mobile and desktop devices allowing you to enjoy your favorite decentralized applications anywhere you like.

PIRL team is developing and will provide various useful decentralized applications such as:

- Decentralized Live Streaming & Video Sharing PIRLTube
- Decentralized Escrow Protected Marketplace PIRLMarket
- · Decentralized File Sharing & Storage- PIRLStorage
- · Decentralized Applications Explorer- PIRLAppsStore

PIRLApp will be continuously updated with new useful applications giving the power of decentralization in users hands.

REFERENCES

All efforts have been made to provide a comprehensive list of all sources and references used to compile this review. This may not always be possible to fully provide. Proof of Review accepts no responsibility for any content at these links. Please refer to our website Terms and Conditions for more information on the use of external links.

*https://coinmarketcap.com/currencies/PIRL/

*https://git.PIRL.io/community/PIRL

*https://docs.PIRL.io/en/masternodes/

*http://stats.PIRL.io/

*https://PIRL.io/en/blog/thoughts-news-ethereum-asic-miners

*https://PIRL.io/en/roadmap/

*https://PIRL.io/en/team/

*https://PIRL.io/en/blog/PIRL-monetary-policy

*https://www.youtube.com/channel/UCkBk5T62-fBr5Ev HZjca-A

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