



Monetary Policy

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DRAFT V1.0

Aion: The third-generation blockchain network

MONETARY POLICY

ABSTRACT

This document provides a high-level summary of the general monetary policy for the Aion Network. The Beta Test Net, released on February 5th, 2018, will be followed by an open-public Test Net in March. The Proof of Work (PoW) Main Net is planned to be launched in Q2 2018. Validator* rewards will be based on a fixed inflationary model, representing an annual 1% inflation of total Aion. Considerations for the individual reward structures of future Aion blockchains with different consensus models is under active research. This monetary policy has been developed with the goal of achieving the economic needs of our Aion-1 network design, while providing sufficient incentives for the adoption and growth of the PoW release.

As an initial draft we are requesting comments, feedback, and ideas from the community as we continue to update the model and test our hypotheses in advance of the Main Net launch.

**The term "validator" generally refers to participants in the consensus process (Ex: Miners, Backers, Stakers, Solvers)*

VALIDATOR REWARDS

Validator rewards in the Aion PoW release, take the form of traditional mining rewards, which are calculated based on a 1% annual inflation of the total Aion supply, representing an annual mining reward of ~4.56M AION in the first year. This inflationary model rewards mining participants through new coins, while addressing annual coin loss (key loss, lockup, etc.). An appropriate inflation rate is important to ensure a sufficient amount of active circulating supply in order to promote network utilization and meet increasing demand. When the hybrid consensus network is launched (Aion-1), the inflationary reward model will support the incentive structure for broad participation in the active backing of validators.

The annual inflation rate contemplated results in daily rewards of 12,943 AION in the first year (Post [ramp up period](#)). Mining rewards will take the form of the native AION coin.

Below are the formulas that will be used to calculate the per block mining reward. As we are currently in the Test Net phase, various block times are being tested. At the Main Net launch the per block reward will be set.

$$D_r = \frac{P_{supply} * 1\%}{360}$$

$$B_r = \frac{D_r}{\left(\frac{86,400}{B_t}\right)}$$

P_{supply} = Total AION supply at the start of the period (Ex: Year 1: 465,934,588)

D_r = Daily Reward

B_t = Block Time

B_r = Block Reward

360 = Days per year (Normalized standard)

86,400 = Seconds per day

Three Year Supply Inflation Estimate

End of Year 1 Supply	End of Year 2 Supply	End of Yea 3 Supply
470,493,628	475,198,564	479,950,550

**Projected based on 360 days/year. Actual time intervals based on block times*

AION POW BETA TEST NET

The Aion PoW Beta Test Net (February 2018) will test mining rewards, however test-AION coins will be rewarded. The test-AION coin account will also be created to provide users with test-AION to transact, build and test applications.

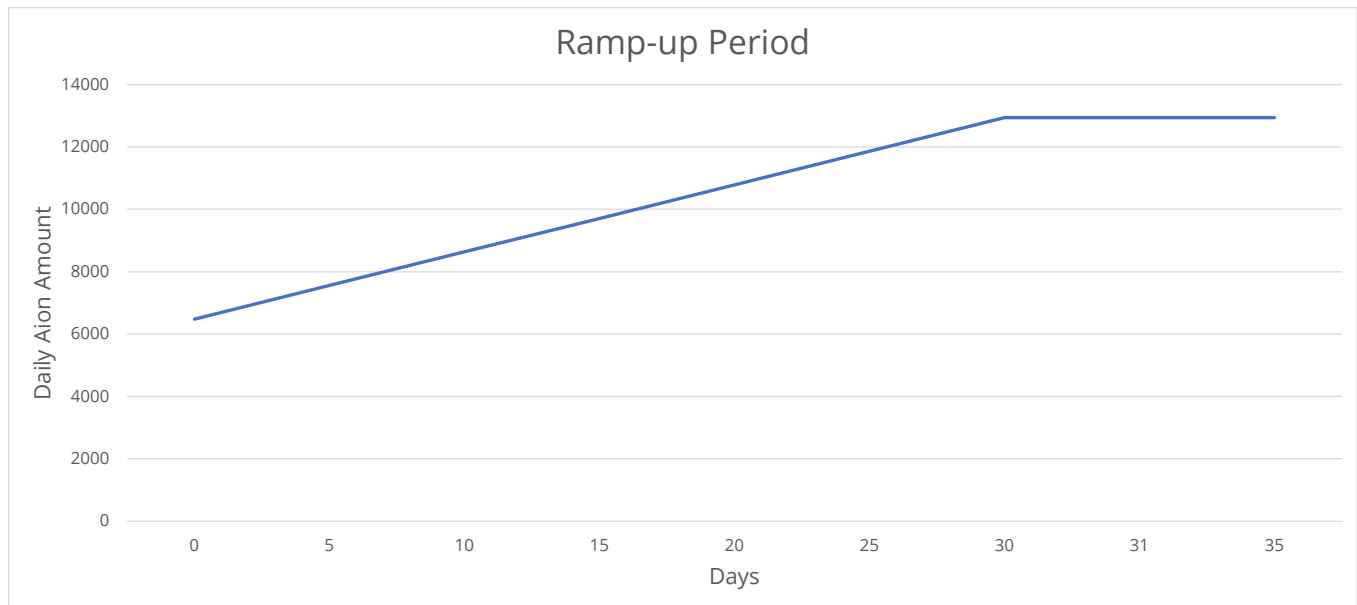
AION POW PUBLIC TEST NET

At the launch of the Aion PoW Public Test Net (March 2018), a ramp-up period will take place for the introduction of mining rewards. During the ramp-up phase mining rewards will gradually increase over the course of 30 days until the full reward is reached. The ramp up period aims to reduce early volatility between network hash rate and difficulty, volatility which may cause faster than normal block times. The Public Test Net will follow this monetary policy and no test-AION faucet accounts will exist.

AION POW MAIN NET

As the Public Test Net continues to scale, we will be actively monitoring the health of the network and releasing patches. Once the network has sufficiently stabilized and has been thoroughly tested, we will announce the launch plan of the Main Net (Q2 2018). In the case of a stable Public Test Net, no roll back or relaunch is necessary and this network will be acknowledged as the Main Net.

RAMP-UP PERIOD



Start Reward (Day 0)	Daily Increase	Final Reward (Day 30)
6,471 AION	216 AION	12,943 AION

**Mining rewards increase per block during ramp-up phase. Values are rounded up.*

The PoW release of the Aion blockchain will be based on a modified proof-of-work consensus algorithm leveraging custom parameters of equihash. This release is intended to serve as a platform to onboard miners, dApp developers, and enterprise users in a real-world environment. This will promote use, feedback, and improvements as we build and test future releases.

UPCOMING CONSIDERATIONS & ONGOING RESEARCH

HYBRID CONSENSUS

Following the PoW release, the next major milestone will be the launch of Aion-1. Aion-1 will be based on a hybrid delegated proof-of-stake and proof-of-intelligence consensus algorithm. As we launch upgraded blockchains, like Aion-1, a bridge will be created between the existing Aion blockchain (PoW) and the new blockchain (Aion-1). With multiple native* Aion blockchains connected and operating in parallel, the total supply of AION will live across multiple blockchains. The 1% inflation-based mining/validation reward will operate across native Aion blockchains, with research on-going on the particular reward structures for the unique consensus models on each native Aion blockchain (PoW, Hybrid).

**A native Aion blockchain, is a blockchain that is launched by the Aion Foundation. AION coins will only exist on native Aion blockchains (Ex: PoW Release, Aion-1).*

MULTI-CHAIN REWARD CONSIDERATIONS

We believe that rewards should be proportional to the utility of a network. The experiments we are conducting relate to providing sufficient rewards that scale with the growth of each Aion blockchain. AION coins will be free-flowing across native Aion blockchains. We aim to promote the stability of existing networks, while rewarding the adoption of new Aion blockchains as they are deployed. The mechanism by which the mining reward is proportionally and dynamically allocated to multiple native Aion blockchains is under research. In addition, the method by which rewards are allocated in each native Aion blockchain (ex: PoW, Hybrid) will meet the economic requirements of that chain's consensus model.

COMMUNITY ENGAGEMENT

As an open-source project, transparency and community engagement is key to Aion's success. This high-level summary is the first of multiple economic blogs and papers to be released in the coming months as we develop and test hypotheses, models and scale our Test Net publicly. We are requesting anyone with any ideas, comments or feedback to engage with us on the [Aion Forum - Monetary Policy](#) thread. Looking forward to your thoughts.