What is the Northern Equinox Fund?

The Northern Equinox Fund is a cryptocurrency-based fund that will operate in a similar way to a hedge fund. The Northern Equinox Fund will be valued in Bitcoin and will actively manage a portfolio of cryptocurrencies, with the intention of providing monthly returns to the investors in the fund.

The purpose of the Northern Equinox Fund will be to relieve selling pressure on the Northern market, by creating an additional use case for the coin, that will provide its holders with another revenue stream, besides staking and running masternodes.

Furthermore, the fund will also serve as a way to lock up the supply of the NORT coin, and lower the amount in circulation, thus benefitting the holders of the coin.

Glossary

NEF - The Northern Equinox Fund

AUM - Assets Under Management – the total valuation of assets held by the fund, denominated in Bitcoin. This **includes** other cryptocurrencies and **excludes** the NORT taken in from investors.

NUM – Northern Under Management – the total amount of NORT taken in by the fund from investors.

IS - Investor's Share – the investors share in the fund, shown as a percentage.

EIM - Earnings in Month – the total profit earned by the fund in a given month.

How will the NEF operate?

The **NEF** will have its value denominated in terms of Bitcoin – all of the fund's total assets under management (**AUM**) will be converted into BTC value for reporting statistics and returns on the fund.

Investors who wish to buy into the fund will **only** be able to do so using the Northern (NORT) cryptocurrency, that will serve as the native coin to the **NEF**. Once an investor has deposited into the fund, their NORT coins will be locked up for a **minimum of 90 days** and during that period, the investor will be eligible to receive monthly pay-outs from the profits of the fund.

The total amount of NORT that the fund holds on behalf of investors (when they buy into the fund with their NORT coins) will be known as the **NUM**, or "**Northern under management**".

The **NUM** will be capped so as to not allow it to surpass the value of the **AUM** – as this would lead to a situation where the fund has taken more value in NORT from investors than it has in assets under management.

NUM value < AUM value

How will an investor's contribution be calculated?

The valuation of the fund has two parts – the **AUM** and the **NUM.** When an investor buys into the fund, he does so with NORT coins and these coins contribute to the amount of Northern under management (**NUM**).

An investor's share (**IS**) of the fund will be calculated and presented as a percentage, that will be a calculation of the following:

$$\frac{\text{The investor's contribution in NORT}}{\text{The total NORT under management (NUM)}} = \text{Investor's share of the fund (IS)}$$

For the sake of illustration, we will give an example of how this will work in practice. Let's imagine the current **NUM** or Northern under management of the fund is **90,000 NORT.**

Next, lets introduce "**Investor A**" who wishes to buy into the fund. He will need to do so by purchasing Northern (NORT) coins and depositing them into the **NEF** for a period of 90 days or more.

If Investor A has **10,000 NORT** coins he wants to buy into the fund with, he can calculate his **IS** as follows:

$$\frac{\text{10,000 NORT (Investor A's contribution in NORT)}}{\text{100,000 NORT (The fund's total NUM after investment)}} = \text{10 \% (Investor A's IS)}$$

Assuming that the **NUM** stays the same, Investor A will receive 10% of the fund's earnings over the duration of his investment into the **NEF**.

How will an investor's pay-outs be calculated?

Now that we have calculated how an investor's share of the fund (**IS**) is calculated, we can determine how much the investor will be paid out from the **NEF**. In order to be eligible to receive monthly pay-outs from the fund, the investor's funds **must have been invested into the fund for at least 30 days.**

Once the 30-day requirement has been met, the user will be eligible to receive payments. On the day of that particular monthly payment, the investor will receive his portion of the fund's earnings in the month (**EIM**).

Assume the fund earns **0.5 BTC** in a given month, Investor A (who owns a 10% share in the fund) will receive **10% of the earnings** that month, which will equate to **0.05 BTC** (0.5 BTC * 10%).

Investor pay-out = Investor share (**IS**) x Fund earnings in month (**EIM**)

Therefore, at the end of every month, every investor in the fund who has had their NORT coins invested for at least 30 days, will receive a pay-out from the fund which will be calculated based on the investor's share in the fund as a percentage (**IS**), multiplied by the fund's earnings for the month (**EIM**).

Contribution periods

To mitigate causing confusion and difficulty when calculating the **NUM** and **IS,** for the purposes of paying out investors, we will only allow funds to be deposited for **one day**, every 30 days. This means, at 30-day intervals we will allow new users to invest NORT into the fund.

Should an investor miss the contribution period in a particular month, the investor will need to wait 30 days until the next contribution period. This is because we don't want to create a situation where we have different users depositing and withdrawing every day, which would cause a constant fluctuation in the value of the **NUM.**

Rather, we will on-board everyone's funds for the month on one day, and run the fund with that **NUM** for the next 30 days, after which all investors will receive their monthly pay-outs.

Can an investor withdraw their NORT?

After an investor's funds have been locked into the fund for the minimum period of 90 days, he will be eligible to withdraw his NORT coins from the fund if he wishes to do so.

Reporting to investors

The Northern team will report the value of the **NUM** and **AUM** to investors on a weekly basis, as well as the **total earnings accrued** in that week. For the first implementation of the fund, this will be done manually, but in future, a platform will be built that will allow **24/7 monitoring** of all of the abovementioned statistics.

Funding the NEF

The **NEF** will fund itself in the following ways: Firstly, the Northern team currently holds an amount of Northern, recovered from the previous blockchain, that will be slowly liquidated – primarily via **OTC** (Over-the-counter) deals, to secure more Bitcoin and thus more assets for the fund.

The team funds can be viewed here:

http://explorer2.nort.network/address/NetkVD437EtSBC6D3CURBzDrLeMsGkxYFW

Of course, these funds will not be enough to fund the **NEF** for the entirety of its operations, therefore, the Northern team will also make use of the **treasury system** that has been built into the Northern blockchain.

When in need of more funds for the **NEF**, the Northern team can submit a **budget proposal** to the Northern blockchain and all Northern masternode holders will be able to vote on this proposal.

This will allow for **up to 10%** of the block reward on the Northern blockchain to be used to fund the **NEF**, with the consensus and approval of the Northern community and masternode holders, as well as investors in the fund.

When a budget proposal is passed by the community, the network will pay out the desired funds to the Northern team, and the team will then diligently use these funds to fulfil of the activities that the funds were requested for.

How does the value of the NORT coin affect the fund?

As the fund will consist of a basket of cryptocurrencies, the overall value of the fund (**AUM**) will not be affected by the price of the NORT coin. However, the price of NORT will be used to determine the maximum amount of NORT that the fund can take in from investors, before ending up with a situation that dilutes the investors' shares in the fund.

As we do not want to dilute the shares that investors have in the fund, we will cap the amount of NORT that can be taken in by the fund, using the price of NORT as a guideline. In order to prevent dilution, we will not allow the **NUM** to exceed the value of the **AUM** – meaning **we will never take in more value from our investors than we currently hold in assets under management.**

How much NORT can be invested into the fund at one time?

As mentioned above, we do not want to dilute the shares that investors have in the fund. Dilution would occur when we take in too much NORT and are not able to produce enough of a return each month to justify the amount of NORT invested into the fund.

Imagine a situation where the fund has a total value or **AUM** of **1 BTC**. In order for us to avoid dilution of investors' shares in the fund, we would need to keep the value of the NORT invested into the fund (**NUM**) **under 1 BTC**.

By doing this (not allowing users to deposit more than **1 BTC** worth of NORT into the fund while when our **AUM** is **1 BTC**), we will never be in a situation where we have taken in more value from our investors (who invest with NORT) than we currently hold in the **NEF**.

If we did not take this approach of **limiting the amount of NORT that can be invested into the fund**, a situation could arise where we would likely end up taking more value from our investors than we hold in the fund.

For instance, by allowing unlimited NORT to be invested into the fund, we may end up having taken 2 BTC worth of value from investors while only having 1 BTC of assets under management.

Not only is this unethical, but it would also lead to dissatisfaction from our investors, should we not be able to produce 2 BTC's worth or returns with only 1 BTC under management in a particular month.

Therefore, we will always ensure that the value of NORT invested into the fund **does not** exceed our **AUM** and to do this we will need to calculate user's investments based on the current price of NORT coins.

How is the price of NORT determined for the purpose of the fund?

For the purpose of calculating the maximum **NUM** the fund can have, we will determine the value of the NORT by referring to the NORT market and evaluating the current price of the coin.

For instance, if we have **100,000 NORT** in the fund, held in **NUM**, we will calculate its value by taking the price of Northern from the market and multiplying it by the amount of Northern in the **NUM**. If the current price of Northern is **1000 satoshis**, the value of our **NUM** would be **1 BTC** (100,000 NORT x 0.00001 BTC).

Therefore, we would need to ensure that our **AUM is higher than 1 BTC**, to ensure the value of the **NUM** does not exceed the value of the **AUM**. To counter market fluctuation and volatility in the price of Northern, we will only allow the fund to take in **75%** of the value of the **AUM.**

At any given time, the fund will only take in 75% of its total capacity from investors in the form of NORT – meaning the **NUM** would ideally not exceed the **AUM** too rapidly.

By using the NORT price as a guideline, the team will have a way of determining whether or not the portfolio needs to be rebalanced and if NORT should be redistributed to investors.

Safety measures to counter dilution

Dilution refers to investors' shares losing their overall "weight", due to the issuance of more NORT into the fund. As mentioned above, we will counter this by not allowing more than 75% of our total capacity to be exceeded at one time – which allows some space for an increase in the price of NORT coins, before we would need to **re-distribute** Northern coins back to investors.

However, if a situation does happen to arise where the value of the NORT coin rises rapidly in price, the effect would be that the fund would end up with a **NUM** valuation higher than its **AUM**.

For instance, imagine at the start of the month that the **NUM** is valued at **1 BTC** and the **AUM** is valued at **2 BTC**. In this situation, **1 BTC** of value has been taken in by investors in the form of NORT coins (**NUM**), and the fund holds assets valued at **2 BTC** in the **AUM**. The fund then has only 50% of the value in the **NUM** than it has in the **AUM**.

As **NUM** must always be less than **AUM,** this situation is **safe and is favourable** to investors. However, let's imagine that over the course of the month, the price of the Northern coin **doubles**. This would now mean that **NUM** is **2 BTC** (as the price of Northern has doubled, we now have double the value of Northern under management).

If the **AUM** is still **2 BTC**, we are now faced with a scenario where the fund is on the point of holding more value from its investors in the form of Northern, than it has in other assets. In this situation, at the end of the month, NORT coins will be **redistributed to investors** based on their **IS** and based on the current value of the coin.

This means that in any given month, if the value that the fund has taken in from investors **exceeds** the value of the fund's assets, as a result of the Northern coin going up in price, the **NEF** will pay back NORT coins to investors (in addition to their profit pay-out), to rebalance the **NUM** to a point where it is **within the 75% threshold.**

To summarise, the **NEF** will ensure it never withholds more value from its investors than it holds in other assets. If a situation arises where this is not true, the **NEF** will, in addition to the normal earnings, pay back NORT to investors in the fund to rebalance the value of the Northern under management.

Practical examples

Scenario 1: Let's imagine that an investor has **20,000 NORT** he wishes to invest into the **NEF**. We need a few variables in place before we can calculate how much he will earn in monthly pay-outs.

NORT price – 0.00001000 BTC (1000 satoshis)
NUM – 100,000 NORT invested already, **excluding** the investor's 20,000 NORT.
AUM – 2 BTC worth of assets under management

Therefore, the value of the **NUM** is **1 BTC** (100,000 NORT x 1000 satoshis) and the **AUM** is **2 BTC**, meaning the fund is operating within its capacity. When the investor buys into the fund, his **IS** or share in the fund can be calculated as follows:

$$\frac{\text{20,000 NORT (his investment)}}{\text{120,000 NORT (the total NUM after his investment)}} = \text{16.7\% (the investor's IS)}$$

After he has invested, the **NUM** will now be **120,000 NORT,** as a result of his addition to the fund, and the new **NUM** value will be **1.2 BTC** (120,000 NORT x 0.00001 BTC). Furthermore, he will now have a **16.7% share** in the profits for that month (if the **NUM** stays the same).

Let's now assume in this month, the fund pays out **0.5 BTC** in total (**EIM**), he will be eligible to receive **16.7%** of that, if his coins have been in the fund for at least 30 days. This will equate to a pay-out of **0.083 BTC** for the investor in this month. He will not receive NORT back in this month, as the fund does not need to rebalance – the **NUM** is at **1.2 BTC**, which is lower than the **AUM** of **2 BTC**.

The investor can keep his funds invested in the **NEF** for a **minimum of 90 days**, after that he will be free to decide whether to take his 20,000 NORT back, or keep it in the fund for another 90-day period. During his investment in the fund, he will receive a monthly pay-out from the fund based on how much of a share he owns in the fund (his **IS**).

Scenario 2: In this scenario, we will examine what will happen in a situation where the NORT price goes up rapidly and the fund ends up taking in **more value from the investors' NORT contributions than it holds in other assets.**

NORT price – 0.00002000 BTC (2000 satoshis)
NUM – 100,000 NORT
AUM – 1.5 BTC worth of assets under management

Let's assume that for most of the month, the NORT price was **1000 satoshis**, but around the end of the month there is a rapid rise in price to **2000 satoshis**. This will result in the **NUM** value going from **1 BTC** (100,000 NORT x 1000 satoshis) to **2 BTC** (100,000 NORT x 2000 satoshis).

It's now clear that the fund is holding **2 BTC** worth of NORT in the **NUM**, but only has **1.5 BTC** worth of assets in the **AUM**. This is not a favourable situation, as it essentially means the fund is withholding more value from its investors than it can offer in liquid assets.

In this situation, along with a monthly pay-out of profits, all investors in the fund will receive an additional **pay-out of NORT from the fund**, that will serve to lower the amount of NORT the fund has taken from investors, and in turn bring the **NUM** value to below the **AUM**, as it should be. The amount each investor will receive back in such a situation can be calculated as follows:

Total NORT Redistributed x Investor's share (IS) = Pay-out in NORT

The amount of NORT redistributed back to investors will be calculated by using the current NORT price at the time of the payment, and determining how much NORT would need to be taken out of the **NUM** in order to bring the value of the **NUM** to a maximum of **75% of the AUM**.

Fund activities

Unlike a traditional hedge fund, the Northern Equinox Fund will only be cryptocurrency-based and will not hold any other assets. Furthermore, the fund will not be making use of leveraged trading, nor will it be taking "short" positions in the market.

The fund will derive its main profits from the income generated by holding and running a basket of masternode coins. This will account for roughly **70%** of the assets under management. The other **30%** will be kept in **liquid BTC** and will be used to "**market make**" and "**arbitrage trade**" cryptocurrencies across a variety of markets.

The profits from both of these activities will be added to the **EIM** and paid out to fund investors on a monthly basis, based on their **IS** at the time of the payment.

The cryptocurrencies selected to be added to the fund will be done by the Northern team, with the guidance and assistance of the community and investors in the fund. Furthermore, the Northern team will attempt to broker deals and form partnerships with other cryptocurrency projects, with the intention of being able to add those coins to the **NEF** for some kind of discount.

Custody of investor funds

The Northern team will be tasked with the handling and safe-keeping of investors' funds, for the duration of their investments in the **NEF**. The Northern team will implement industry-grade security measures to ensure the funds remain safe in our custody – such as using hardware wallets for applicable coins, along with securely encrypted wallet files for any coins not compatible on hardware devices.

Although the Northern team **absolves all liability** in the event of a hack and **no guarantee** is given on the return of the funds (in the event of a hack or an unforeseen event), the Northern team will still implement any measures possible to reimburse investors, should anything happen to their funds while in the custody of the **NEF**.

Such measures would include: Paying investors' NORT back from team funds, making use of the treasury to pay back funds, or liquidating an excess of **AUM** to cover any losses investors may have faced.

Once again, although the Northern team will take these measures to make investors whole again, **no guarantee** is made on the return of funds, partly or in entirety, in the event of a hack or unforeseen event.

Terms and conditions

The Northern Equinox Fund is a purely cryptocurrency-based fund, and is subject to the volatility of the cryptocurrency markets. Therefore, there is **no guarantee** on the amount that will be paid out to investors on a monthly basis. The amount paid out will be determined by the profits generated from the fund in that month.

In order to be eligible to receive returns, an investor needs to have their funds invested into the **NEF** for a minimum period of 30 days before the first payment will be made. A lockup period of 90 days will be mandatory for all deposits into the fund.

As the Northern Equinox Fund is the first of its kind, there may be some aspects of the structure and mechanics of the fund that are subject to change. The Northern team **reserves the right to change any structure or terms of the fund, subject to the notification of all investors.**

In the case of a major change that would completely change the properties of the fund, all current investors will be given the opportunity to withdraw their funds before the change is made and given the option to re-invest after a material change has been made. **The 90-day rule will not apply in the case of a change like this.**

Furthermore, the Northern team reserves the right **to change any of the fee amounts** described below, in order to meet the demand of the fund or pay for any costs associated that are currently unforeseen.

Fees

Deposit fee (when depositing NORT into the fund) **– 2% in NORT**

Withdrawal fee (when withdrawing NORT from the fund) **– 2% in NORT**

Monthly management fee (taken before monthly pay-out) **– 5% in BTC**