

Eternal Coin

**XEC**

White Paper Ver.2.1

Atom Solutions, Co., Ltd. June 13th, 2018



## TABLE OF CONTENTS

OVERVIEW	3
THE REASON WHY VIRTUAL CURRENCY IS NOT USED TO MAKE PAYMENTS	3
OFFICIAL CURRENCY EXCHANGES	4
ETERNAL WALLET	6
E-LOOK APPLICATION	8
ETERNAL PROJECT	8
ADDITIONAL FUNCTIONS, ETC. THAT ARE SCHEDULED FOR RELEASE IN THE FUTURE	9
NUMBER OF ETERNAL COINS ISSUED, AND A BREAKDOWN OF THEIR USAGE	16
OVERVIEW OF ETERNAL COIN	17
OTHER FILED PATENTS	17
CONCLUSION	18

## OVERVIEW

There are many virtual currencies being used around the world today. And it is likely that many new ones will be developed and introduced to the market on a daily basis.

Of those myriads of virtual currencies, many apparently don't necessarily have to be in the form of virtual currency.

We have been constantly asking questions like: "Aren't cash and electronic money better alternatives?" or "Could virtual currency be more convenient than electronic money and credit cards?"

The conclusion we've reached is that, as long as it is used within the confines of a country, virtual currency will never be more convenient than cash, electronic money, or credit cards.

Based on this conclusion, we came to a decision to develop a type of currency that can be used to make payments globally as a hub currency, unlike any cash, electronic money, or credit card can be also remitted internationally in small amounts, and we named it 'Eternal Coin.'

## THE REASON WHY VIRTUAL CURRENCY IS NOT COMMONLY USED TO SETTLE PAYMENTS

### Reason 1

For example, if a user at a restaurant wants to pay the bill with virtual currency, it could only be done using the virtual currency that the user retained. However, there would only be a small number of users that purchase virtual currency solely to settle a payment at a restaurant.

It's because most users that own any virtual currency aim to profit from an increase in its value, and not to use it for payments.

(Undoubtedly, there could be some users who use virtual currency to settle payments if they get profits in the virtual currency that they retain.)

Meanwhile, most restaurants would also prefer if the customers used fiat money to pay their bills instead of virtual money, as the restaurants that accept payment with virtual currency would face the risk that the value of virtual currency could drop before it is converted into cash.

Based on the above reason, virtual currency would not be used to settle payments over electronic money or credit cards.

## Reason 2

Another reason that is discouraging users from settling payments with virtual currency is that there is no company for building infrastructures for payment settlement purposes.

To enable settlement of payments with virtual currency, one of the following parties must take a lead in the aforementioned endeavor:

- (1) Virtual currency issuer;
- (2) Virtual currency exchange; or
- (3) Shop or EC site that wants its customers to use virtual currency to settle payments.

### (1) Virtual currency issuer

As for the scenario in which a virtual currency issuer is to take the initiative, no issuer would actually be able to start taking action, if the virtual currency is not centrally controlled by the developer. On the other hand, if the virtual currency is centrally controlled, it would be possible to proactively develop the necessary infrastructures. However, needless to say, it will be extremely difficult to develop the infrastructures beyond the borders of the country in which it is based.

### (2) Virtual Currency exchange

The aim of most exchanges is to increase the number of users as well as the volumes of the trades that take place there. Since those exchanges will be competing with each other, they cannot be counted on to perform activities and actions to build infrastructures exclusively for any specific brand of virtual currency, as the benefit will significantly outweigh the cost.

### (3) Shop or EC site that wants its customers to use virtual currency to settle payments.

Most shops and EC sites that accept payment with virtual currency might fall into this category.

As the purpose of their adoption of virtual currency as a payment option is to increase customer traffic, it is likely that the number of shops and EC websites that will accept payments with the most popular brands of virtual currency will continue to increase. Meanwhile, the issues as identified under 'Reason 1' above will still remain in this case.

## **OFFICIAL EXCHANGES**

Atom Solutions has implemented an official virtual currency exchange system for trading Eternal Coins, and there are currently official Eternal Coin exchanges in Japan, Hong Kong, Philippines, and Korea.

Those official exchanges are tradable with Eternal Coin only and do not allow any other virtual currencies to be traded.

Advantages of the official virtual currency exchange system

- (1) Construction of infrastructures
- (2) Multi-currency wallet
- (3) Security and anti-money laundering measures

(1) Construction of infrastructures

As the official exchange only tradable in Eternal Coin, it is necessary to acquire a Eternal Coin (Eternal Wallet) users in the countries where the exchanges are located, and to do so, efforts must be made in each country to improve the usability of the Eternal Coin. To achieve such goal, the Eternal Coin exchanges need to build infrastructures for the Eternal Wallet and Eternal Coin users and also conduct activities that are aimed at increasing the number of shops that accept Eternal Coin.

Under this official currency exchange system, we are striving to enhance the usability of Eternal Coin and increase the number of shops that accept Eternal Coin in each country.

(2) Multi-Currency Wallet

One of the features of the virtual currency wallets being adopted by other exchanges is that they are able to handle a wide variety of virtual currencies. In case of Eternal Wallet, sales and purchase can only be done using Eternal Coin. However, under the official exchange system, a whole host of different fiat currencies can also be stored in the wallet.

In this connection, we firmly believe that the Multi-Currency Wallet is essential for international remittance and exchange transactions involving virtual currency.

Each fiat currency being stored in a wallet is managed by the exchange in the country where the fiat currency is issued. For example, the JPY are managed by the exchange in Japan. Likewise, PHP is issued and managed by the exchange in the Philippines. As the Multi-Currency Wallet allows the exchanges to manage their respective fiat currencies, the system has effectively eliminated the foreign exchange risk.

(3) Security and anti-money laundering measures

Typically, virtual currency exchanges allow the users to remit their virtual currencies to other exchanges and wallets. However, in the case of Eternal Coin, the users can only remit between Eternal Wallets.

As each country's official exchange requires a new user to present its identification ID and address information for verification, any Eternal Coins that are stolen by a hacker could be tracked down with relative ease. In addition, as any given Eternal Coin wallet can be suspended, Eternal Coin is not a desirable target for potential hackers as it would not be worth their effort. Likewise, it would be highly difficult to conduct money laundering activities using Eternal Coin.

## **ETERNAL WALLET**

Eternal Coin's main feature is it is not just a virtual currency. Our distinctive feature is the Eternal Wallet, of which Eternal Coin is an integral part.

\*Certain functions of the Eternal Wallet may not be available depending on the legal restrictions of the country where the exchange is located.

### Features of the Eternal Wallet

#### (1) Transfer via Phone Number function (patent filed)

Generally, when virtual currency is sent to some other wallet, the transmission will be directed at the wallet address on the receiving end. In the case of Eternal Wallet, however, money can be sent by specifying the recipient's phone number. Aside from providing the added convenience of not having to enter a long wallet-address every time sending money to another wallet, this is also a significant function from a security perspective, as it can effectively prevent identity thefts.

#### (2) DOT (patent filed)

A transaction fee of around 5 Yen is charged for each Eternal Coin purchase, sale, transfer, etc. using the Eternal Wallet.

DOT is a scheme in which 50% of all fees that have been received is distributed to the Eternal Coin owners on a weekly basis (12:00 JST every Wednesday).

These transaction charges will be distributed based on the ratio of each Eternal Coin owner's XEC holding.

In other words, as long as there are users that purchase, sell, and transfer Eternal Coins via their Eternal Wallets, there is no imaginable scenario in which Eternal Coin will lose its value completely.

#### (3) Foreign Currency One-touch Transfer (patent filed)

In a typical case of international remittance using virtual currency, wallet must be setup at both the transmitting and receiving ends, and following steps shall be executed.

Fiat currency issued by the country  
↓  
Purchase the virtual currency  
↓  
Send the money to the wallet of the receiving party  
↓  
Sell the virtual currency to acquire the local fiat currency.

The Eternal Wallet allows users to convert their local fiat currencies into the fiat currencies used by the receiving parties through Eternal Coin and also transmit money to the wallets of the receiving parties with a touch of a button.

Fiat currency issued by the country  
↓  
Specify the wallet address of the receiving party and the amount to be remitted.  
↓  
Remittance in the target fiat currency completed.

This timely remittance with a touch of a button not only offers more convenience but also helps alleviate the foreign exchange risk.

#### (4) Value Division Function (patent filed)

When paying for a product or service with a virtual currency, there is the issue of difficulty in calculating the amount being owed, if the price of the virtual currency is too high.

Let's assume a case where a user wants to purchase a product that costs 50 Yen with a virtual currency that is priced at 100,000 Yen per coin. In this case, as it is rather cumbersome to precisely calculate how many coins equal the price of the product, the user could make a mistake and arrive at a wrong amount.

In order to address this sort of issue when the price of Eternal Coin becomes too high, the Eternal Wallet offers a Division function.

For example, when an Eternal Coin is divided into 10, the number of Eternal Coins the user holding will increase to ten folds. The value of each coin also becomes 1/10th of its previous value, so the aggregate value of the asset being held by the user remains constant.

\*30 days prior notification will be given in case of any such division.

\*There is currently no plan of division.



## **E-LOOK APPLICATION**

Though Sharing Business has emerged as a new business model globally, we have released the E-look application so that those that do not own a house to lease or an automobile to operate as a side business will be able to earn a second source of income.

\*Please visit our website for more details.

<https://www.el-ook.com/s.php>

\*This application is produced and operated by Eternal Live, the official exchange in Japan.

## **ETERNAL PROJECT**

To speedily spread the use of Eternal Coin and the Eternal Wallet globally, only our efforts would not suffice.

For this purpose, we have been operating the Eternal Project through the support of various people and businesses from around the world spread the use of Eternal Coin and Eternal Wallet.

The Eternal Project is a mechanism through which various individuals and companies contribute by making suggestions on their respective areas of expertise, infrastructures, etc., and receive remuneration in Eternal Coin.

While Atom Solutions is responsible for reviewing such suggestions and deciding the amount of remuneration payable to each collaborating party (in Eternal Coin) at the moment, our plan is to enable the Eternal Wallet users to decide these matters through a voting process in the future.

\*Please visit the website for more details.



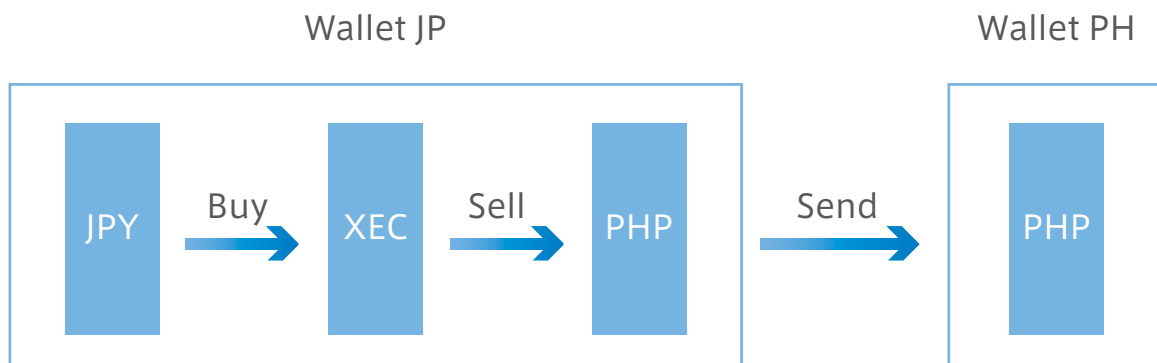
## ADDITIONAL FUNCTIONS, ETC. THAT ARE SCHEDULED FOR RELEASE IN THE FUTURE

Money / Currency Exchange Function (patent filed)

We are currently developing the following structure in order to enable international remittance or currency exchange at the lowest possible cost in the world. (The current plan is to start the service from August.)

« Shortcoming of the existing functions »

The current version of the Eternal Wallet (hereinafter referred to as the “Wallet” ) is equipped with the function to remit money in a different foreign currency with a touch of a button. For example, for remitting money internationally from Japan to Philippines, the user can purchase Eternal Coin (hereinafter referred to as “XEC” )



with JPY that is in its Wallet, and then sell XEC to obtain PHP. The user can then send the PHP to the Wallet of the recipient that is residing in the Philippines. As this function allows users to perform “purchase, sale, and remittance” transactions with one touch, the number of users that take advantage of XEC as a convenient hub currency has been on the rise.

However, the function also has its shortcoming as well, which is that the “amount of money that is sent to the recipient tends to become smaller when the remittance is done in a large amount” .

Placing market orders to purchase and sell XEC means that the user is relying on the trade volume that exists at that particular moment in the XEC market. Hence, if the trade volume is relatively small, the very buy order placed by the user could raise the price of XEC, and, likewise, the price of XEC could drop when the user sells its XEC. As explained above, while the one-touch foreign-currency transmission function is optimal for remitting money in small amounts, it is not suitable for remitting money in large amounts.

« Foreign currency exchange function »

In order to resolve this issue, we are currently in the process of developing a new function that allows users to exchange money at TTM rate. If this can be achieved, then money exchange can be done at the “lowest possible rate in the world” . With the new function, if a user wants to remit money overseas, it will change money to the currency that is being used in the country to which the money must be sent and remit the currency to the Wallet of the recipient. This way, the user can make international remittances at the lowest price in the world.

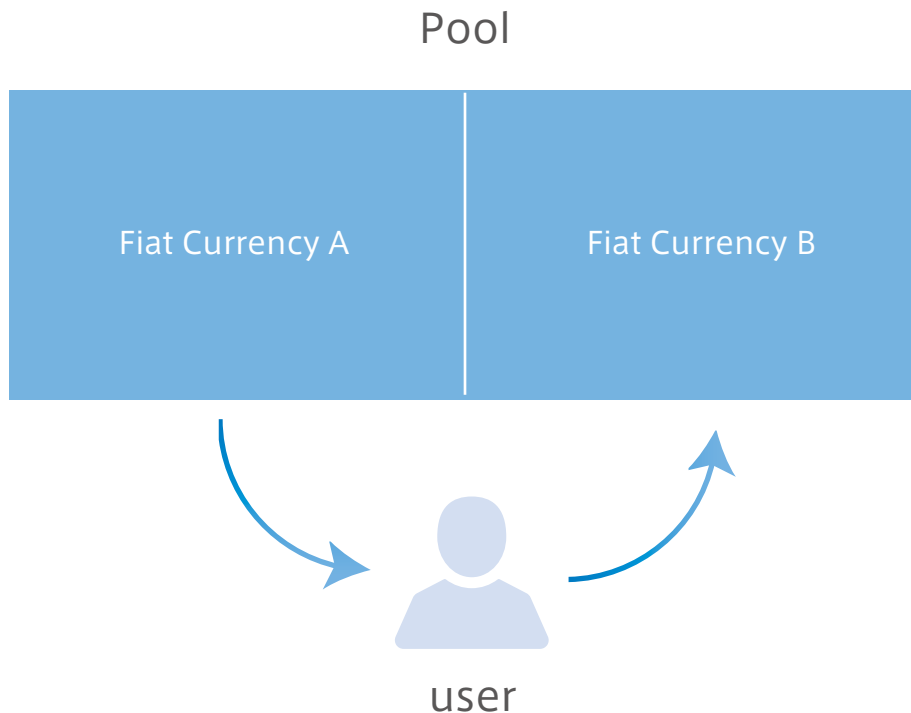
« Foreign exchange fee »

For each foreign currency exchange transaction performed using the Eternal Wallet, a 0.5% fee will be charged.

« Pool »

If a user wants to perform a foreign currency exchange transaction using the Eternal Wallet, then specifying the target currency and the amount would suffice. However inside the Eternal Wallet, the user’s fiat currency is first changed to XEC, and then XEC is sold to obtain the target currency. Therefore, the following transactions will have been completed when fiat currency A is changed to fiat currency B.

- ① XEC is purchased using fiat currency A.
- ② XEC is sold to obtain fiat currency B.



For this purpose, it must be noted that such transaction is processed through the 'pool' instead of the exchange.

Fiat currencies are kept in the pool. When a user exchanges money from fiat currency A to fiat currency B, the fiat currency A enters the pool, while the fiat currency B is taken out of the pool.

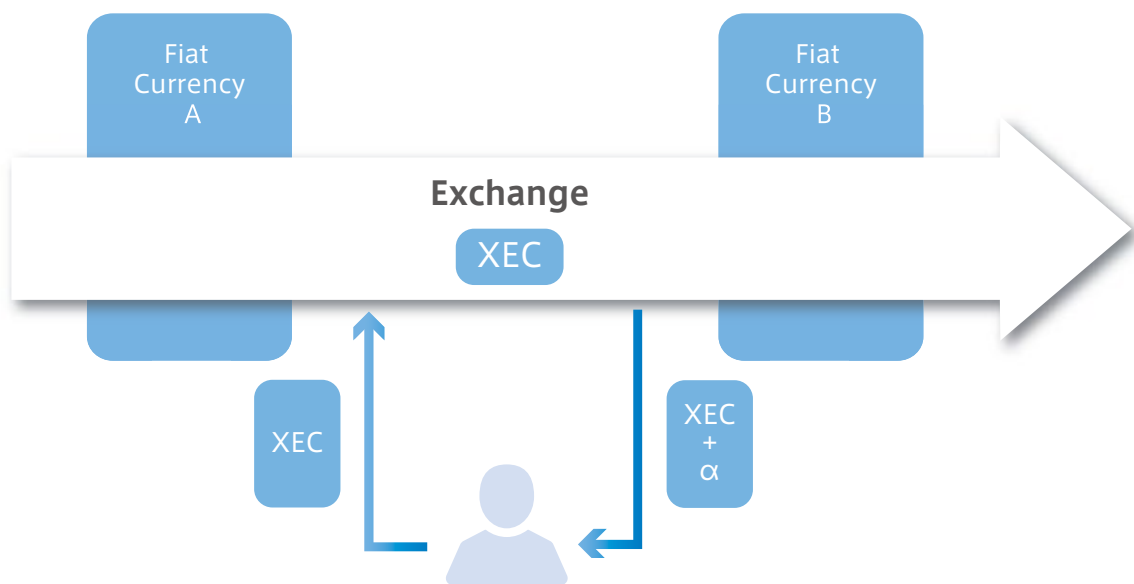
Apparently, if the transactions to change money from fiat currency A to fiat currency B are more, the amount of fiat currency A in the pool increases, while the amount of fiat currency B in the pool decreases.

### « Lending of XEC »

For money exchange using pool, XEC are to be purchased and sold, and the purchased XEC was lent by other users.

Any user willing to loan their XEC to other users can lend the XEC from the Wallet.

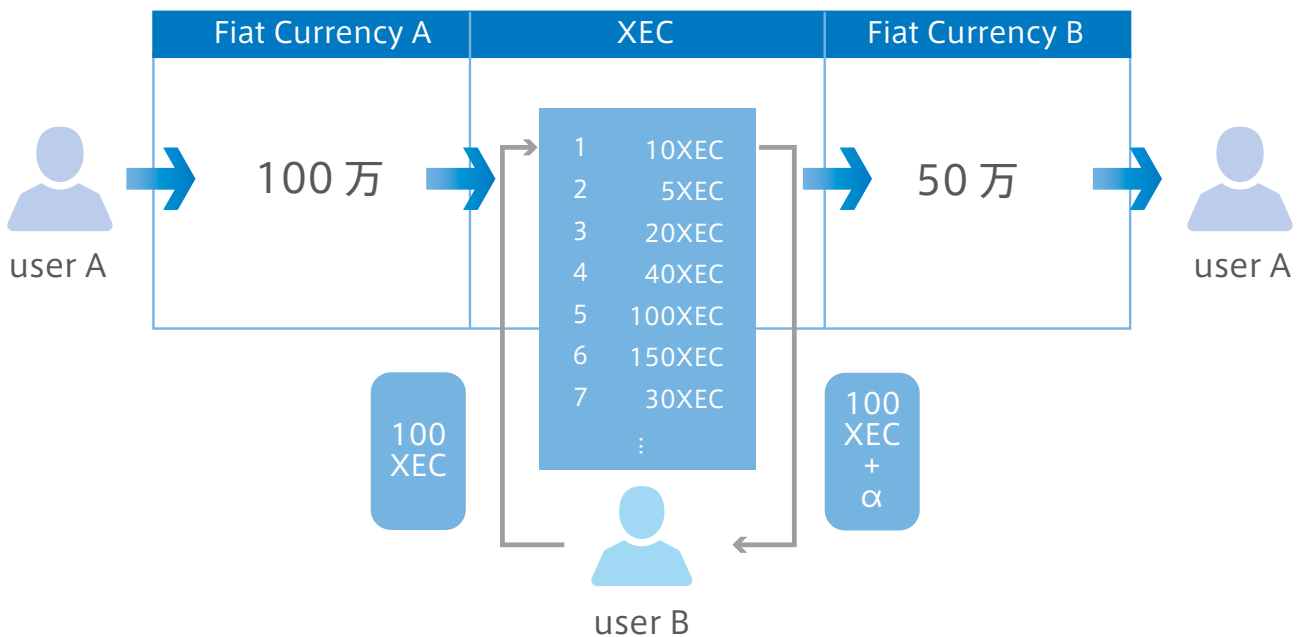
When a user loans its XEC to another user, the loaned XEC will be returned to the Wallet of the loaning user upon the completion of the money changing transaction by the borrowing user, along with a portion of the transaction fee paid by the borrowing user.



\* XEC will be lent at the time of exchanging equivalent amount of XEC to the fiat currency.

« First-come-first-served rule of the XEC lending system »

The benefit a user can gain by lending the XEC to other users is receiving a portion of the money exchange fee paid by the borrowing users as interest. However, it does not mean that a user lending the XEC will receive such fee immediately. Since this lending system is operated on a first-come-first-served basis, loaning users are able to receive their fees in the chronological order of lending.



« XEC lending charges »

Eternal Wallet needs to be setup at the official exchange being located in each country, but the basic rule is that only those living in any of the countries where the exchanges exist are allowed to open their Eternal Wallet accounts. The fee received on lending the XEC varies depending on the Wallet in the country where the account was originally set up.

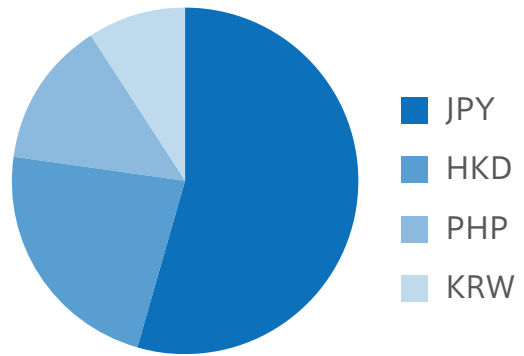
« Fluctuation of the lending fee »

When a user lends its XEC to another user, the amount of the lending fee payable to the user is automatically calculated based on the remaining balance of the fiat currency in the pool. In this connection, it must be noted that the Wallets issued by the exchanges being located in the countries where the remaining balance of the fiat currency in the pool being traded is low tend to yield higher amounts of lending fees, through automatic calculation.

### Exchangeable Amount

JPY	→	PHP	120000000JPY
HKD	→	JPY	3000000HKD
PHP	→	JPY	90000000HKD

### Pool Currency Ratio



### XEC Lending Service Fee

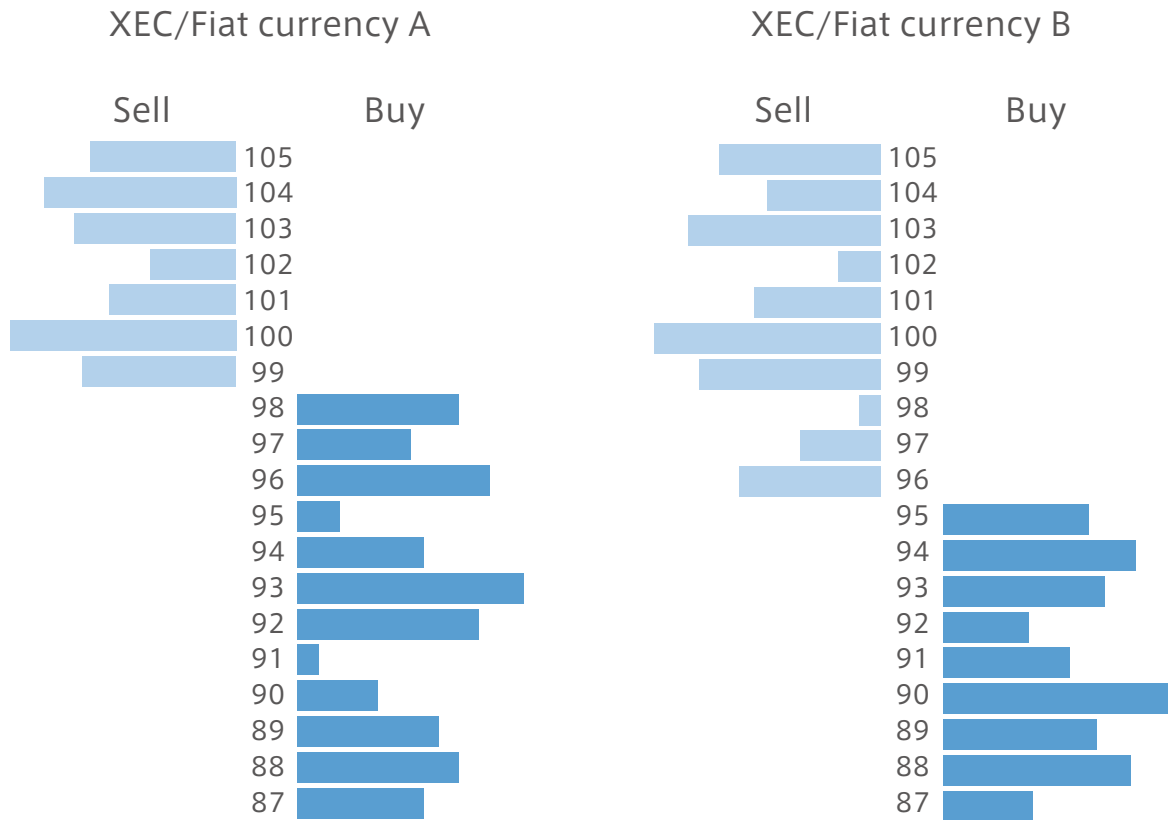
XEC(JPY)	0.32%
XEC(PHP)	0.76%
XEC(HKD)	0.51%

### Loan Yield (24 Hours)

PHP	0.09%
HKD	0.08%
JPY	0.07%

### « Variance in the price of Eternal Coin »

The fact that the amount of lending fee varies between different countries (i.e., exchanges) means that the value of Eternal Coin varies with country. Let's assume a case where the lending fee is set at 0.3% in the Wallet in country A, while the fee set in the Wallet of country B is 0.2%. The value of XEC in country A is higher, so the users purchasing A/XEC will outnumber the users purchasing B/XEC. As a result, the price of A/XEC will become higher than that of B/XEC.



« Arbitrage »

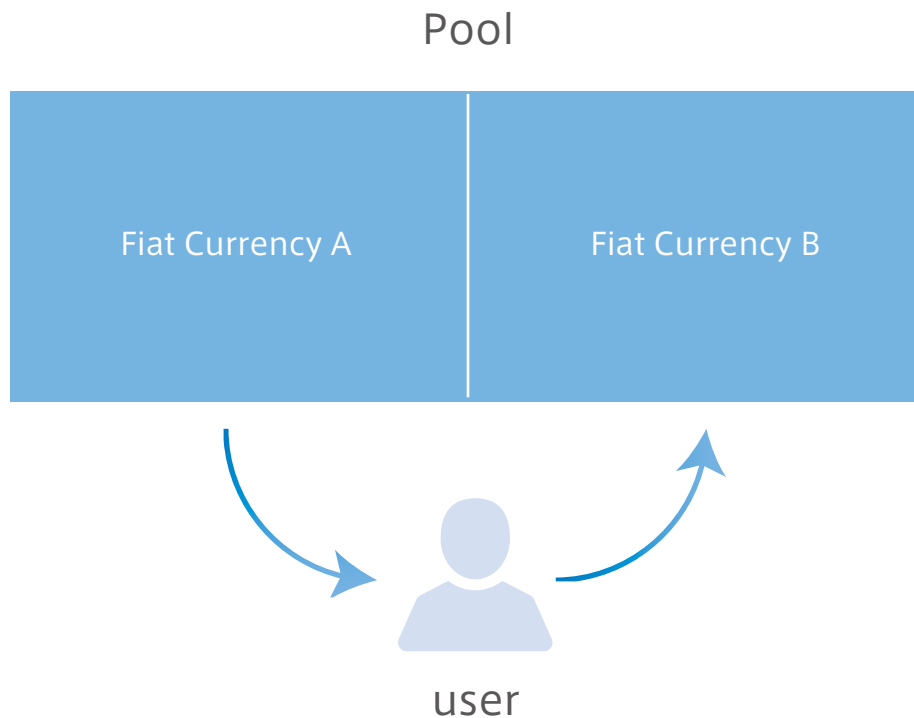
If the price of XEC varies depending on the currency pair being traded, it means that users can engage in arbitrage.



« Optimization of the remaining balance left in the pool »

A user that engages in arbitrage is exposed to the foreign exchange risk and therefore must eventually convert its holding back to the original fiat currency that is issued by the country where the user is based.

Such necessity to cover the user's holding back to own country's fiat currency means that the user needs to utilize the money-exchange function of the Eternal Wallet. In other words, when the following type of money change is executed, the transaction is processed through the pool wallet.



As shown above, XEC lending fee fluctuates depending on the balance of fiat currency left in the pool. Such mechanism causes the price of XEC between different currency pairs to also fluctuate, whereby arbitrage opportunities are created and the balance between different fiat currencies in the pool returns to a normal level. Also the XEC lending fee of the Wallets issued by the exchanges in different countries will also revert to a reasonable level.

« Capital in the pool »

Any fiat currency available in the pool could be recharged by lending the XET to the exchanges in different countries by Atom Solution which is the Eternal Coin issuer.

Same number of XEC will be lent to exchanges of the countries and the XEC will be sold through the respective country's exchange, converted to fiat currency and will be sent to the pool.

If Atom Solutions has a plan to lend XEC for the purpose of keeping it in the pool, the plan will be announced at our website at least 30 days in advance.



When Atom Solutions lends XEC to various exchanges, and those exchanges convert XEC to different fiat currencies, fiat currency in the pool go down, which could theoretically mean that the secured value of the lent XEC may deteriorate. However, a lower balance of the fiat currency in the pool in one country means that the balance of the fiat currency in the pool in other countries has risen. The value of the XEC that Atom Solutions lends to different exchanges is calculated by considering the sum total of the balance of the fiat currency in the entire pool, so the risk of the secured value of XEC deteriorating would be limited.

Likewise, the foreign exchange risk is reduced by the fiat currencies of various countries entering into the pool in a well-balanced manner.

« Users' benefits of making international remittance through money exchange »

The remittance fee, which has long been the main issue when trying to send money overseas, will be widely reduced.

As there is no spread, international remittance can be made at the lowest cost possible in the world.

Money can be remitted in a matter of seconds, as it is a P2P transaction between the Wallets of the transmitting and receiving parties and foreign exchange risk will also be reduced, which is another significant benefit to the users.

The "pool" and "lending interest of virtual currency" as explained above are concepts that have never been implemented in the world before. By combining these novel features with the official exchange system and the multi-currency wallet, Eternal Coin allows the users to drastically reduce the cost of foreign currency exchange and international remittance, and also to make overseas remittances instantaneously, both of which have been issues that remained unresolved over the years.

## **NUMBER OF ETERNAL COINS ISSUED, AND A BREAKDOWN OF THEIR USAGE**

Number of Eternal Coins issued: 200 Million

Breakdown (June 2018)

Operating cost: 10%

Pool Wallets: 20%

Eternal Project: 20%

Market circulation: 50%

The information provided above indicates the current status. If a change to any of the aforementioned figures occurs by 1% or more, the information will be updated in the White Paper and also at the website.



## OVERVIEW OF ETERNAL COIN

Issuer of Eternal Coin: Atom Solutions, Co., Ltd.

Formal name: XEC (Eternal Coin)

Total number of XEC issued: 200 Million

Transmission/reception speed: 0.5-3 seconds (might be slow depending on the internet connection)

Transmission/reception method: P2P transaction through the Eternal Wallet

Method for obtaining Eternal Coin: Obtain from trading in the market at one of the official exchanges being operated by Atom Solutions or from other users.

Eternal Coin transaction fee: Approx. 5 Yen of XEC per transaction

Transaction fee distribution rate: 50% of all XEC transaction fees collected will be distributed to the users that own XEC, in proportion to their holding ratio.

Transaction fee distribution day: 12:00 JST every Wednesday,

Minimum number of XEC tradable: 0.00001XEC

Minimum currency unit tradable: 1 Yen, 1 Philippine Peso, 1 Hong Kong Dollar, 1 U.S. Dollar, 1 Korean Won

Trading hours: 24 hours, 365 days

Exchanges: Japan: Eternal Live, Philippines: Token Hub, Hong Kong: Eternal Hong Kong, Korea: Eternal Korea

Tradable currency pairs: XEC/JPY, XEC/PHP, XEC/HKD, XEC/USD, XEC/KRW

## OTHER FILED PATENTS

◀ Virtual Reality (VR) ▶

It is clear that the field of VR will also rapidly expand, aside from the virtual currency. In the near future, it will likely become commonplace for various live events to be broadcasted in VR. When such technology becomes available, the consumers will be able to travel around the world, attend live concerts, watch the audience from the performing singer's view point, or go on a roller coaster ride, all without leaving the comfort of their own homes. This sort of VR experience will be most exciting if it involves live events instead of previously recorded images.

When such new era arrives, it is likely that VR broadcasters will show up around the world, much like the YouTubers today.

While most business opportunities have abounded in relatively more affluent countries and regions in the past, it can be anticipated that bigger VR distribution business opportunities will present themselves in the corners of the world that cannot be easily traveled to, such as in the middle of the Amazon, deserts, frigid regions where auroras loom in the night sky, and remote islands that have no inhabitants.



When constructing such VR distribution business model, one of the key issues is the fee charging system. As remitting money in small amounts to VR content distributors across borders is not feasible, realistically speaking, more reasonable payment methods might be electronic money/points and virtual currency.

Atom Solutions is targeting to complete the development of an application for streaming live VR events, within current fiscal year.

\*Atom Solutions has filed a patent for remitting payments to live VR broadcasters in electronic money and virtual currency.

#### « Points »

Based on the idea that equipping smart phones with a function that can aggregate all redeemable shopping points from the point cards that the consumers keep in their wallets will enhance the level of convenience, we are currently developing an application to aggregate all the point cards into one.

The features of the application will be explained at the time of public announcement.

\*Atom Solutions has filed a patent that will allow users to aggregate data from multiple point cards, and also enable business operators to issue points through the application.

## CONCLUSION

We believe that, in these new realms of business as described above, various services and products will be integrated into each other to offer novel types of value and convenience that those services and products would not be able to achieve alone.

Examples of such product-service combinations include virtual currency, international remittance, and electronic money; VR, small charge, and live event streaming; and points, IOU, cashing, and advertisement.

As a Fin-tech company, Atom Solutions will strive to continuously improve its virtual currency, Eternal Coin, as well as the Eternal Wallet based on innovative ideas and with the support of people from around the world, in order to spread the use of Eternal Coin to every corner of the globe.