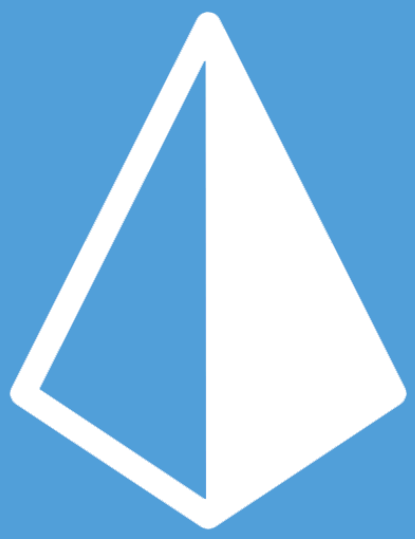

# AirTrade Whitepaper

# Summary

AirTrade is the next-generation e-commerce transaction protocol based on blockchain technology. AirTrade protocol will build a complete e-commerce system through smart contract groups to support the next-generation e-commerce products and completely solve the numerous drawbacks in the current global e-commerce system, such as the high cost of third-party payment tools, the high cost of the e-commerce platform server, the high transaction fees of cross-border transactions and the exchange rate fluctuates, the trust issue of the unfamiliar mutual transaction and so on. The next generation of e-commerce products will be completely decentralized, enabling the free trading of digital assets and digital assets, digital assets and non-digital assets or services in any two roles in the world. Different protocols are responsible for solving different problems in the transaction process. Different combinations of smart contracts will provide more powerful trading process function for the users on the protocol layer, and inject incentives for the development of the protocol. With the incentive of the token economy, all parties involved in the transaction will jointly develop transaction boundaries while sharing the benefits of ecological growth.

# 1 Background

The birth of Bitcoin brought new ideas to the development of this world. The strength of the Bitcoin exists not only in its advanced technology, but also in the fact that it injects new rules into the world with irreversible manner, mobilizes the motivation of making a profit of each participant, and promotes its development at top speed.

After Bitcoin, more and more projects and teams begin to realize that the power of the blockchain is not the improvement of productivity, but a full burst of productivity by changing the production relations under the original social system. In the past business world, companies created products and served users while investors focused on the company's service capabilities and revenue. The roles of users, employees, and investors were separate.

The rules implemented by code of blockchain have become the laws of the economy world, and always run reliably. Everyone who recognizes these rules can participate in the construction of this world freely without considering any objective factors.  At the same time, this rule system allows participants to enjoy the services generated by this world and share the huge dividends brought by the growth of the world.

# 2 Initiatives

## 2.1 Problems Faced by Centralized Business Transactions

### 2.1.1 Third-party Guarantee Agency Required in Transaction

Centralized e-commerce platforms need to use the third-party payment guarantee agencies ( Papay , Alipay, ....) to protect the assets of both parties. The transaction of the legal currency actually goes through a very complicated processe, which includes the paying bank, the receiving bank and the third-party guarantee agency, before it is eventually liquidated. Therefore, guaranteeing the transaction is necessary, but the cost is

also high. Besides, the users need to pay up to 2% to 12% payment amount as security cost, which increases the user's purchase cost.

### 2.1.2 Credit Risk of Both Parties

The level of credit has always been the most concerned issue by both parties. However, in the era of e-commerce, credit has become a series of data, and both parties must estimate whether the opposite side is reliable according to a series of data, such as trading volume, evaluation, and credit rating, etc. Because of the problems of the centralized mechanism, the perpetrators have opportunities to use various means to forge credit data, forge identity information, defraud the other party's trust and deceive their money. This has become the biggest problem in traditional e-commerce. Users cannot trust the data of the platform and cannot make correct judgments.

### 2.1.3 Transactions Between Different Currencies are Limited by Local Financial Policies

If users in two different countries trade on a commercial transaction platform, they will face the problem that two different currencies cannot reach a transaction. One party needs to convert its currency into the currency supported by the other party in order to conduct the transaction. The process is complex, and there is a risk of exchange rate fluctuations. At the same time, due to the financial control policies of different countries, users can only exchange their foreign currency within the limits and can only purchase limited cross-border goods.

### 2.1.4 The Proliferation of Piracy and Fake Products

Since the foundation of the e-commerce platform, the problem of counterfeit goods has existed and has not been solved very well. A lot of fakes on super platforms such as Alibaba, ebay and Amazon have also been criticized. It is a long-standing problem in traditional e-commerce that how to ensure that all aspects of the traceability of goods unchangeable, including the supply chain, source of origin, distributors and logistics.

### 2.1.5 Confidence Issues of Centralized Institutions

Where there is a transaction, there is bound to be a trade dispute. In traditional e-commerce platforms, disputes are handled by the platform with a centralized mechanism, which is not transparent, and users can only accept the results given by the platform and find nowhere to defend. In cryptocurrency trading, the centralized exchange is also facing a serious of trust problems. Since the user will store all digital currency in the cryptocurrency exchange, the exchange can do a lot of non-transparent operations, such as misappropriating users' cryptocurrency.

### 2.1.6 The Maintenance Cost of the Centralized Organization is Too High

Centralized e-commerce platforms need to spend a lot of money to purchase servers to support online transactions. They need to hire enough customer service personnel, server maintenance personnel, and need to purchase large amounts of traffic to match transactions. This huge amount of expenditure will eventually be passed onto both sides of the transaction, and increase the user's transaction costs once again.

### 2.1.7 The Security Risks and Transparency in Centralized Platform

Centralized cryptocurrency exchanges use centralized wallet to store users' cryptocurrency. All these platforms are extremely vulnerable to attack. It will bring significant loss to the users once the digital currency is stolen. Many exchanges have been stolen huge amount of bitcoins, such as Mt.Gox, Bitstamp, Bitfinex, DAO and CoinDash. Some exchanges will also embezzle, because it is not transparent and no one knows what they have really done.

## 2.2 Vision and Ecological Construction

The development and concept of blockchain technology allows us to discover the possibility of the evolution of traditional e-commerce. The next generation of e-commerce must be based on the trusted computing environment of blockchain, which will eliminate the role of traditional e-commerce that does not generate value, and make one person who is not acquainted with the other in the world trade safely, freely and equally.

What AirTrade is doing is the next generation of e-commerce infrastructure. Based on blockchain technology, we have built a complex underlying transaction protocol without any third party involved by using a series of smart contract groups. Anyone can join the network as traders. Any organization can enter this network and use the smart contracts created by AirTrade to provide users with services in the network. In order to gain enough support quickly for this protocol, AirTrade also will build a sound economic model, so that all traders and developers who make a contribution to the ecological protocols can enjoy the huge bonus brought by the growth of ecology, promoting ecological growth eventually.

Based on the AirTrade protocol and its economic model, all participants will eventually jointly build a global shared economic infrastructure for the future business world. This infrastructure will break the boundaries between states, nations, and religions, which allows less developed countries and regions to obtain quality commercial services the same as developed countries, and enables the underdeveloped countries and regions to achieve leap-forward development of the economic system.

AirTrade will create a brand new business world.

# 3 Core Concepts

## 3.1 ATT

ATT is the abbreviation of the AirTrade token. ATT has issued a total of 50 billion pieces. ATT has certain value and can be transferred on the blockchain, and its security is guaranteed by the elliptic curve digital signature algorithm (ECDSA). ATT not only is a cryptocurrency, but also contains many core functions.

## 3.2 Participation Right

ATT is the fuel of the AirTrade ecosystem. All the core rights and privileges granted by the tokens are the proof of the interests and holders have the right to participate, vote, and contribute in their ecosystems.

## 3.3 Trading Medium

ATT is the basic exchange medium in the AirTrade ecosystem. All costs in the ecosystem are priced in ATT.

## 3.4 Investment Right

In order to allow developers to provide better service for ecological users, we will support the high-quality developers through the foundation, and at the same time, we will broadcast all high-quality developer projects to all ecological users, achieving a trinity of users, developers and investors within the ecosystem. The investment currency will be ATT.

## 3.5 Node Representative

Node representatives collect the transactions, bundle them into a block, and then broadcast it to the network. Their roles are similar to the miners in the Bitcoin ecosystem. However, the consensus algorithm that AirTrade uses is the equity certification mechanism, while Bitcoin uses the work certification mechanism. A node representative can receive a fee from a reservoir after binding a block successfully, while the the capacity and the amount of the fee of the reservoir is decided by eco-participants.

## 3.6 DPOS

The current blockchain ecosystem is divided into three categories, Bitcoin ecosystem, Ethereum ecosystem, and the graphene ecosystem. Besides, the graphene ecosystem have three representative projects: BTS, Steem and EOS.

Graphene use the consensus mechanism of DPOS. When a node is confirmed, it removes the confirming process of other untrusted nodes except for the agent node, and greatly accelerates block producing speed to approximately 1.5s. Graphene technology enables the blockchain to use higher transaction throughput. BTS can handle 100,000 levels TPS, EOS can achieve up to several million TPS through the parallel chain, and the parallel local chain can even reach the millisecond confirmation speed.

## 3.7 Vote

Users can vote on each operation process of the AirTrade ecosystem.  Specifically, users can even choose proxy voting. It ensures that even if not everyone in the ecosystem has time or inclination to measure each issue, they can also choose the right people to do it on their behalf.

# 4 Scenarios and Applications

## 4.1 Globally Decentralized Digital Currency Trading Platform

Based on the AirTrade protocol, we can build a decentralized digital currency trading platform, and we can support both currency trading and OTC through the design of smart contracts. In the future, with the richness of smart contracts and more participation of different roles in our ecology, we can also support the trading of digital currency financial derivatives.

Decentralized exchanges created based on the AirTrade protocol solve the problems faced by centralized exchanges, users do not need to put digital assets in the exchange wallet. During the transaction process, digital assets will be transferred from the seller's wallet to the buyer's wallet directly, and the entire process is performed by the smart contract through the user's authorization, making the transaction safe, reliable and transparent.

AirTrade will not charge users and developers any fees and will only match resources based on the number of ATTs held by the developers. Therefore, the intermediate cost of the transaction will be greatly reduced. Besides, according to our token economy model, AirTrade will reward ATT to both parties to support the development of the entire ecosystem.

The efficiency of decentralized digital currency trading platforms has not yet reached the efficiency of the centralized platforms. However, the mainnet of EOS will solve this problem. We will implement the protocol on the EOS blockchain to achieve the efficiency of centralized platforms.

Besides, the user experience may be another cause for concern. Thus, we will use smart contracts to simplify the transaction process, eliminate intermediate steps, and design multiple sets of templates to optimize user experience.

The arbitration process involved in the transaction will be completely decentralized and will be performed by the node representatives and the qualified arbitrators.

## 4.2 Cross-border Commodity Trading

Global trade is the foundation of the world economy. After more than 100 years of development, a mature system has been formed. However, cross-border C2C transactions still have a high threshold. Languages, currency types, logistics, and trust mechanisms all face enormous problems. The e-commerce ecology built by AirTrade solves this problem very well. By using the approved digital currency as the subject of the transaction, we can not only save costs to a maximum extent (costs of third-party guarantees and currency conversion may reach 30% of the total transaction amount) but also improve the transaction efficiency enormously (e.g. clearing and settlement between multinational banks may take several days).

The AirTrade protocol also naturally solves the trust problem, allowing two people anywhere in the world to trade without any trust. Trading within the ecosystem will be shared across the entire network. Developers from any country can use the easiest way to create Dapps on AirTrade and enjoy ecological mobility.

## 4.3 Decentralized Escrow Trading Tools

We want to build a cryptocurrency trading tool, which includes a couple of features. Firstly, it does not include any fees. Secondly, it is absolutely safe and reliable. Besides, it can support all kinds of cryptocurrency. Finally, it can spread in the social network simply like a picture.

AirTrade will support such a tool - EasyTrade. If user A wants to sell 10 ATTs, what he needs to do is to create a simple order on AirTrade and authorize his wallet to AirTrade's smart contract. After that, he can post the order information on all social networks. Then, another person, B, who discovers this order information via social network, can click on the order page directly, and the smart contract creates a transaction for both parties. Once the transaction is confirmed, the smart contract will perform payment automatically.

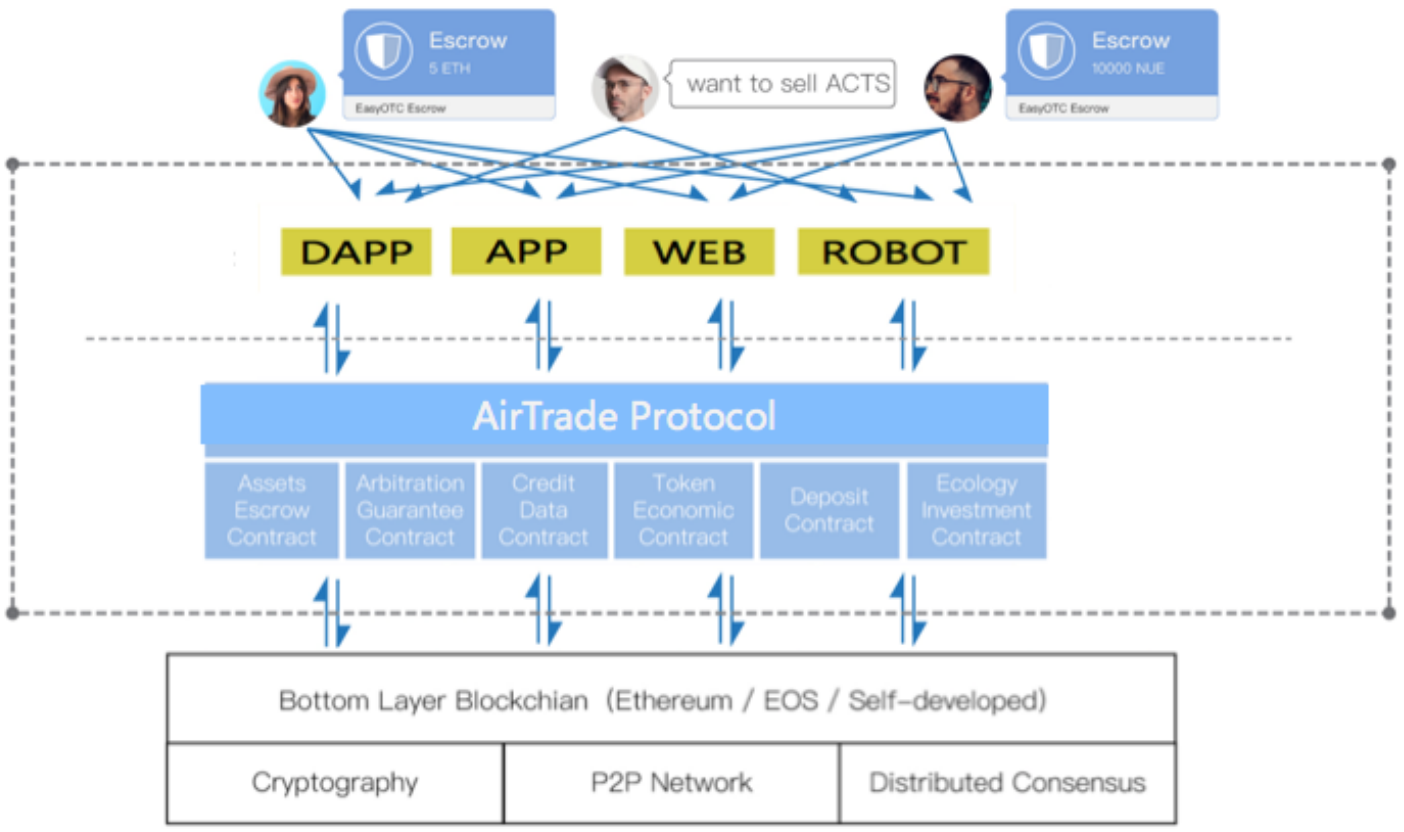


Figure 1. Implementation process of the trading tool

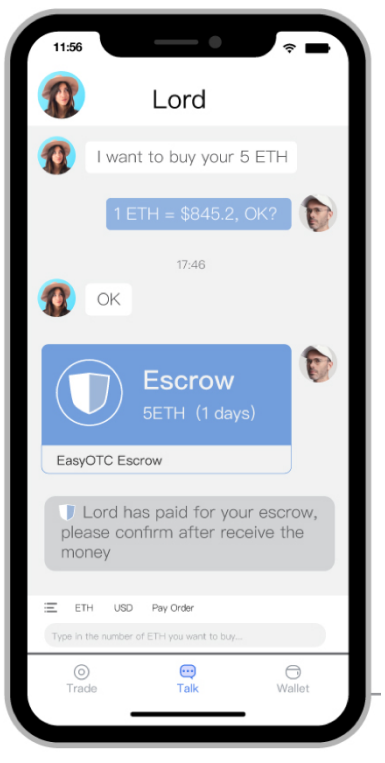


Figure 2. Specific scenarios of escrow transactions

## 4.4 Anonymously Reliable C2C Trading Platform

In the AirTrade ecosystem, the protection of smart contracts can ensure the security of any two transactions. Based on the fact that data on the blockchain cannot be modified or deleted, any one who commits evil or bad behavior in this network will be recorded. Therefore, this network is absolutely trustworthy.

## 4.5 AirTrade-based ICO Platform

AirTrade will invest in the developers through the Foundation and the investment form is through AirTrade's ATT tokens. Any developer within the ecosystem can submit an application and a business plan.

## 4.6 Product Traceability Supply Chain

In order to ensure the healthy development of the entire transaction ecosystem, AirTrade will support companies that trace the origin of products through the Foundation's investment and design API interface to automatically access the data of trading commodities, so that users participating in the transaction can obtain the most comprehensive information about the products.

## 4.7 Decentralized Digital Currency Electronic Wallet

Since the digital currency wallet is the most important blockchain tool, AirTrade will provide a decentralized e-wallet. For users who use the wallet, ATT tokens will be used as rewards according to the transaction amount and time.

## 4.8 Face-to-face Payment Tool

The AirTrade protocol also supports offline transaction scenarios. Offline merchants (such as restaurants, convenience stores, etc.) can generate payment QR code through AirTrade and post it at the front desk. Users can choose to scan the QR code to pay with cryptocurrency. Besides, both parties will receive ATT tokens as rewards.

# 5 Consensus Mechanism (DPOS)

## 5.1 Node Representative Generation

AirTrade's mainnet architecture will use the blockchain consensus algorithm, DPOS, which is proved to be most likely to have a million TPS efficiency. According to this algorithm, anyone who holds tokens on the entire network can select a block producer through a voting system that the elected person can participate in the block production and the token reward. Each token has only one vote but can be re-voted at the beginning of each new poll period.

AirTrade's mainnet produces a block every 3 seconds. Each time, only one node representative can be authorized to produce a block, and if this node does not successfully produce a block, the next node will be authorized.

The architecture of AirTrade's mainnet takes 36 blocks as a cycle, corresponding to 36 node representatives being selected for blocking, and 40 nodes selected as alternative node representatives. If a node representative does not have any blocks within 24 hours, the node representative will be disqualified and qualification will be generated among the alternate node representatives.

## 5.2 Double Spend Attack

Double spend attacks can occur on the blockchain of other mechanisms. This is due to the disruption of the Internet infrastructure that causes communication failures. However, using the DPOS mechanism, the possibility of double spend attacks is very low.

## 5.3 Trade Confirmation

Due to the presence of node representatives, the average time for a transaction is 1.5 seconds, which is written into the blockchain after 1.5 seconds, and all node representatives will get the message of the transaction.

# 6 Protocol Model

The AirTrade protocol consists of a series of interaction standards and a set of smart contracts implemented in a blockchain trusted computing environment. The interaction standard is implemented through a standard interface call to facilitate the use of developers and users. The smart contracts built under the trusted computing environment, through the way of program implementation, agreed and regulated the trading rules, as well as the reward mechanism for the contribution to ecological growth.

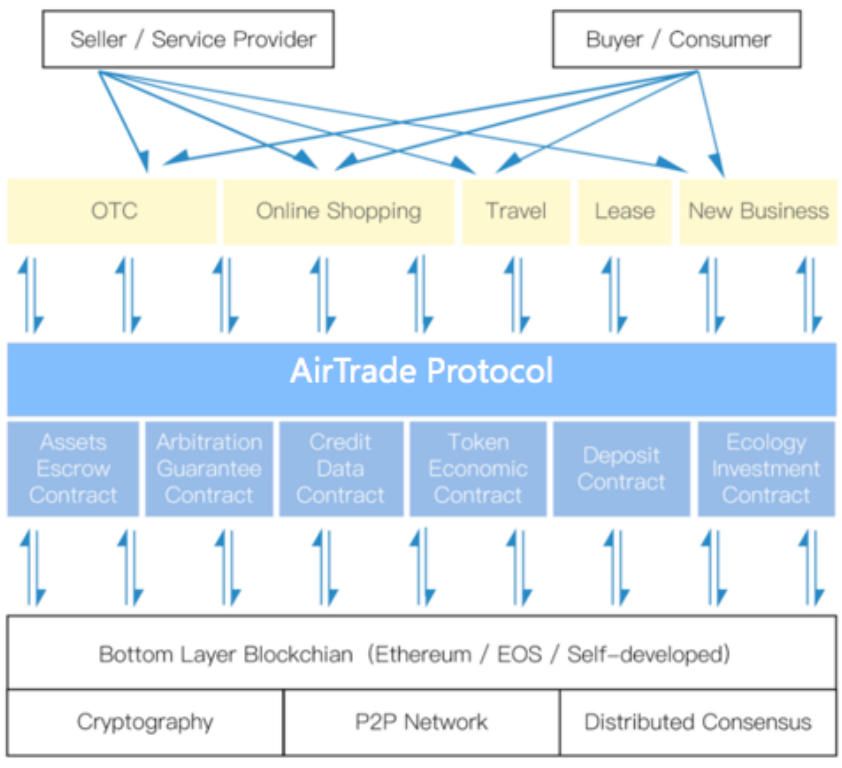


Figure 3. The complete protocol and ecological model structure diagram

AirTrade's design goal is to build a protocol that can support the next generation of e-commerce on the trusted computing platform of the bottom blockchain layer, and to eliminate three parties in transactions through protocols and smart contracts. Thus both parties can complete point-to-point security, transparent, and reliable free trades.

Among them, the asset escrow contract realizes escrow without risk of third-party trust, so that both parties can trade safely and securely.

Arbitration guarantee contracts provide judgments for arbitrations that occur in transactions, and are completed by node representatives and qualified arbitrators. Based on the centralized arbitration applied on the ecological platform, decentralized arbitration results are provided, which makes the system remove third-party arbitration risks.

The credit data contract is based on the transaction behaviors of each user through the transaction protocol, forming a reputation index for the user, so that the user's choice of counterparty can be followed.

The token economic contract is an eco-incentive rule of the AirTrade protocal. It provides token rewards to all eco-development contributors through the contract, making the protocol and its ecology a powerful force for self-growth.

Deposit contracts are the basis for eco product developers to use AirTrade protocol resources. Developers do not need to pay fees to the AirTrade protocol, but their quota of resources will be related to margin.

Ecology investment contracts provide each token holder who has contributed to ecological growth with an approach for investing with tokens, so that ordinary individual users can get more opportunities to get bonuses from eco-development.

## 6.1 Asset Escrow Contract

Through asset escrow contracts, the AirTrade protocol stipulates the implementation in the transaction process, allowing both parties to trade without paying attention to transaction details other than the subject matter of the transaction to achieve safe and worry-free transactions.

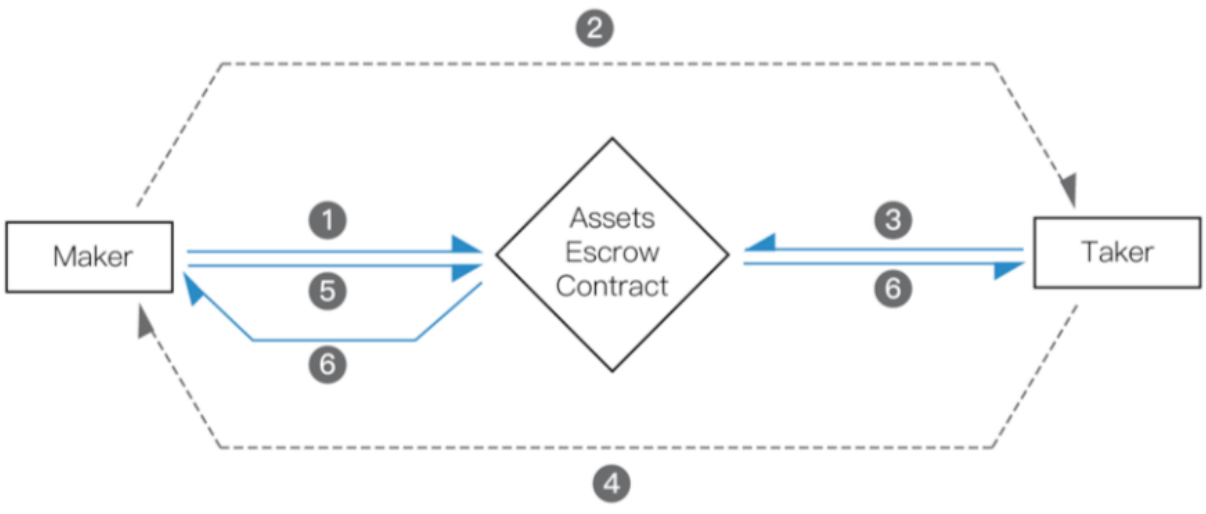


Figure 4. Transaction process with asset escrow

Maker authorizes contract to control the wallet and notifies Taker of the generated escrow information; Taker confirms the escrow information and forms a trading channel, then informs the Maker and delivers the subject of transaction; the Maker completes the transaction after confirmation.

1) Maker authorizes the wallet to the smart contract and sets the amount that the contract can operate;
2) Maker informs its counterparty Taker via online channels after forming a transaction escrow order;

3) After Taker confirms the received escrow order, it also confirms the escrow transaction with the contract; the contract locks Maker's assets and forms a trading channel;
4)Taker communicates with Maker and delivers the subject of transaction;
5) Maker confirms the completion of the transaction;
6) The transaction is completed and the locked assets are transferred to Taker.

Trading parties conduct transactions under a standardized transaction process, which removes a series of security risks and trust risks brought about by traditional third-party asset escrow, making transactions easier.

## 6.2 Arbitration Guarantee Contract

All transaction steps may have the need for arbitration, and as a decentralized transaction protocol, if the transaction arbitration is completely implemented in the form of DAO, efficiency and reliability will be extremely difficult to guarantee. On the contrary, if the centralized arbitration method is used completely, the security and credibility of arbitration are also worthy of doubt.

Therefore, at the beginning of AirTrade's protocol design, we chose the combination of centralized arbitration and decentralized verification, so that the efficiency of arbitration can be ensured, and at the same time, security risks and trust risks of third-party arbitration can be effectively eliminated. AirTrade uses the consensus algorithm of DPOS to refer decentralized arbitration to the node representatives for refereeing and to maximize the efficiency of decentralized arbitration. The arbitral judgment represented by the node will be completely transparent, and any act of evil will likely cause the representative to lose the right to represent the node and the corresponding benefits.

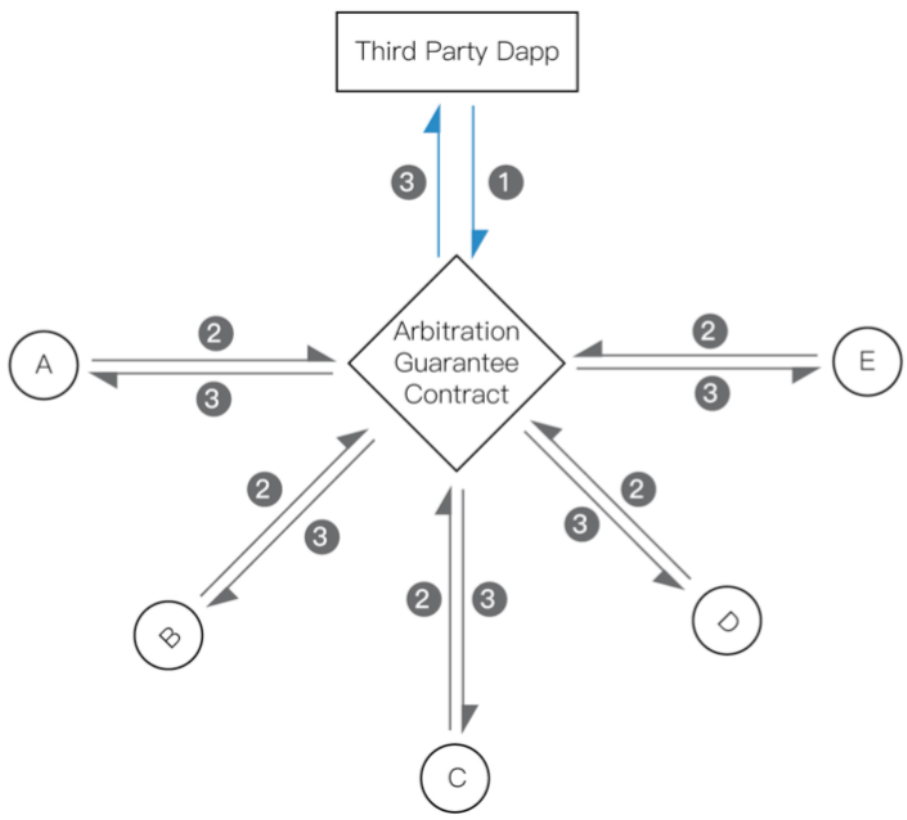


Figure 5. Arbitration guarantee process

Users generate arbitration requirements during the transaction process. The third-party application built on the Airtrade protol used by the user contacts the transaction parties to determine the arbitration; after that, the

third-party application will submit the judgment result and basis to the arbitration guarantee contract, all node representatives will participate in the determination of this arbitration result.

## 6.3 Credit Data Contract

In the transaction process, users and service providers have different transaction behaviors for different transactions, and these behaviors reflect, to a certain extent, the asset levels and credit data of users and service providers. The purpose of the credit data contract is to quantify the behavior of users and service providers through certain indicators, so as to provide possible basis for possible future transactions.

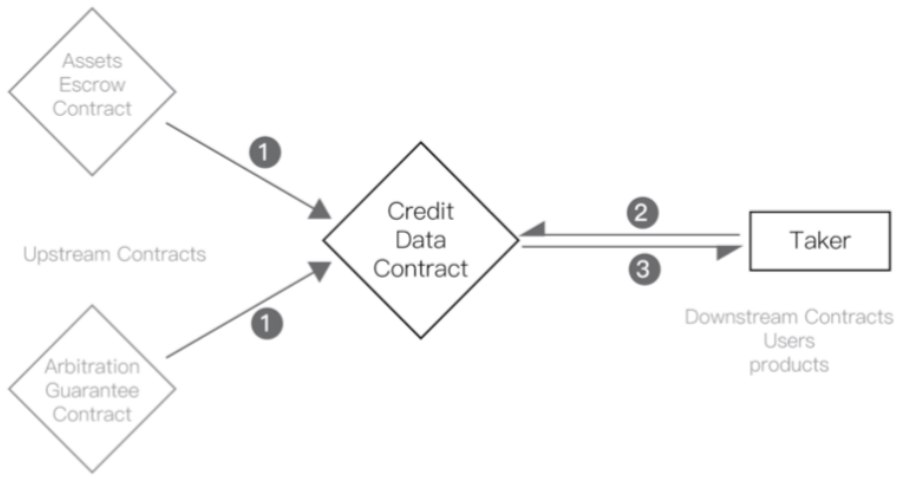


Figure 6. The process of credit data recording and usage

This contract generates valid credit data after the upstream contract fulfills and submit the data to the credit data contract; the downstream users submit request for the use of the data, and the credit data contract returns data according to permissions.

1) The upstream contract generates valid credit information and submits it to the credit data contract;
2) User initiates data use request;
3) The credit data contract returns valid credit data according to user permissions

The credit data contract obtains valid credit data through upstream contracts, such as asset escrow contracts and arbitration guarantee contracts, and obtains the participants' credit level scores through integrated calculations. All individuals or service providers can use the open interface to query the credit data in the AirTrade protocol. Because AirTrade is built entirely in a trusted blockchain computing environment, all data has irrevocable features. This allows the data in credit data contract has credibility without third-party and will provide a reliable basis for future business transactions.

## 6.4 Token Economic Contract

The token chain economy of the blockchain has changed the productivity relationship that promotes ecological development from the bottom, so that production material providers, producers, and consumers are organically integrated. Ultimately, the behavior of all participants will bring tremendous growth momentum to ecological development. Therefore, a reasonable token economic strategy will bring unlimited possibilities for the growth of the AirTrade protocol.

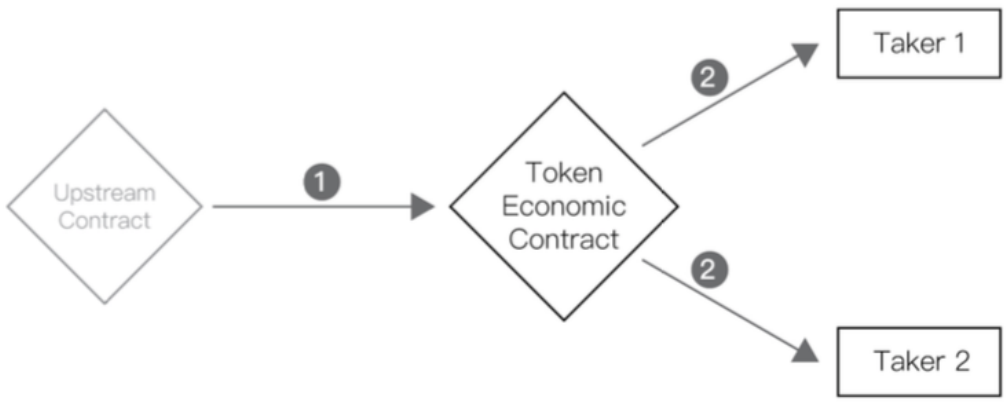


Figure 7. Process of maintaining the token incentive system

The token economic contract is activated after the upstream contract is fulfilled, and the contract records the contribution value of the user or developer submitted by the downstream or upstream contract; when the token incentive period arrives, the token economy contract will convert the value of the contributions of all participants into the number of tokens, and directly issue the tokens to the contributors' account.

1) The upstream contract generates contribution values of participants and submits them to the token economy contract;
2) Tokens will be issued to the contributor's account by the token economy contract when the current currency incentive period arrives

AirTrade protocol as a trading protocol, its ecological value will be reflected in the scale of the overall transaction supported by it. All participants who contribute to the scale of the transaction should share the dividends brought by the ecological growth. Therefore, the AirTrade protocol's token economic contract stipulates the benefits of the entire ecosystem. The decentralized trusted computing environment allows the contract to have universal credibility, which guarantees the vitality of AirTrade's self-growth and derivation.

## 6.5 Deposit Contract

AirTrade's design philosophy is that all ecological co-constructors can get the benefits brought about by the growth of the ecosystem. In the entire ecosystem, in addition to the parties of transactions, ecological applications or service providers are also important contributors to ecological growth. In order to allow more people to participate in the construction of ecological applications of the Airtrade protocol, the use of AirTrade protol does not require developers to pay any fees. However, in order to effectively grow the ecosystem, developers need to deposit security deposits. The AirTrade protocol resources that can be used by ecological applications are related to deposits.

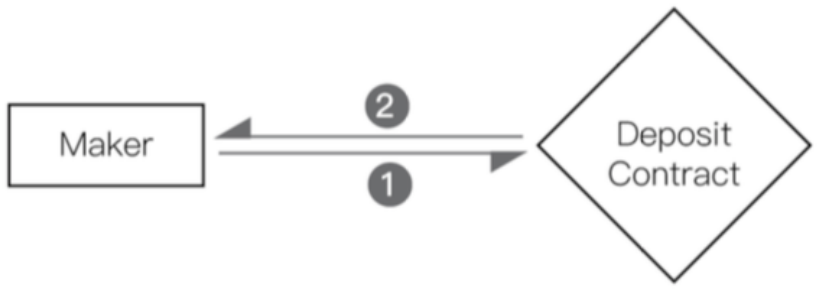


Figure 8. Developer deposit process

All developers who build applications on top of the Airtrade protocol need to pay a deposit in advance, and the protocol resources that the application can use are related to the deposit.

1) The developer deposits to the deposit contract in accordance with the estimated usage;
2) According to the amount of deposit, the deposit contract will issue TradePoint to the developers, which will be consumed when the user interface is called; every unit period, the margin contract will take back the remaining TradePoint, and re-issued in full.

The deposit contract will lock the deposit of the eco-app developer and at the same time, the eco-application account will be filled with a certain amount of TradePoints within each unit period. TradePoints that have not been used up within the unit period will be cleared automatically when the next cycle arrives. In the unit period, the amount of resources that can be called by the ecological application is calculated as follows:

$$t = n*k / m$$

Here k is the amount of deposit, n is the amount of TradePoint that’ s available from deposit, and m is the amount of TradePoint consumed for calling an interface. Therefore, the theoretical maximum number of calls for this interface is t.

Deposit contracts allow a large number of tokens to be used in the construction of AirTrade's eco-platform. The overall token's liquidity will be reduced, and token demand will continue to exist, which will also help increase the value of tokens.

## 6.6 Ecology investment contract

Under the mechanism established by the Airtrade protocol, all ordinary individuals who contribute to ecological growth will receive token rewards and become token holders. In order to obtain more ecological resource use opportunities, eco-application developers need to have sufficient deposits for deposit contracts. Therefore, in the context of a well-functioning business model, developers of ecological applications will continue to have demand for tokens. Therefore, the Airtrade protocol establishes an investment channel for ecological application developers and ordinary currency holders. Ordinary token holders can invest their own tokens in ecological applications that they are looking for, and thus gain dividends for the growth of ecological appliations.

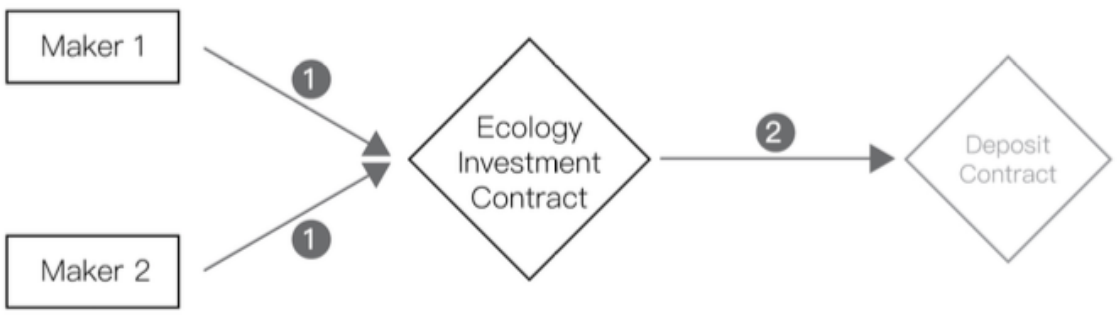


Figure 9. Token hoders investment process

Ecology investment contracts have opened up new uses for tokens in the AirTrade protocol. At the same time, combined with the effect of deposit contracts on the reduced liquidity of tokens, ecological investment

contracts will have a huge driving effect on the growth and token value of AirTrade's ecology. The growth of the AirTrade protocol will no longer be determined by the founding team but will be the result of joint efforts of all token holders.

# 7 Token Economic Model

The AirTrade protocol provides a group of contracts that use blockchain technology and resources to secure and serve transactional behavior. Because all the protocols need to call the resources of the blockchain, it is necessary to establish a system to allocate resources reasonably. The AirTrade protocol uses its own issued tokens to establish a token incentive system. There are two purposes. The first is to offer the AirTrade protocol resource using and fee payment mechanism to prevent abuse. The second is to encourage the development of the entire ecosystem and balance the interests of all participants.

## 7.1 Token Use

### 7.1.1 Resource Use Authority

Currently in the AirTrade protocol, there are six types of contracts designed: asset escrow contracts, arbitration protection contracts, credit data contracts, token economic contracts, margin contracts and ecological investment contracts. The required resources to use each type of contract are different, so we introduced the concept of TradePoint, based on which we designed a mechanism to measure the use of various resources of the AirTrade system.

TradePoint, abbreviated as TP, is the minimum amount of resource consumption in the AirTrade protocol. The holder can lock the ATT into a margin contract so as to obtain a certain number of TPs per unit period, that is, to enjoy the corresponding AirTrade protocol call volume. We call these ATT locked in the margin contract as margin.

The relationship between the margin and the amount of daily acquired TP is as shown in the formula: ATT : TP = 1 : n.

Among them, the daily TP amount obtained by the user is proportional to the deposit amount locked by the user on the day, and if daily TP consumption is not finished and it will not be accumulated until the next day.

The resources consumed by different contracts in the AirTrade protocol are not the same. The resources consumed for trading different levels of funds are also different. Therefore, the TP consumption of the developer is determined by the amount of resources actually required by the contract and the weight set by the developer. The TP is an important indicator for measuring the amount of system transactions.

### 7.1.2 Authorization Ability

If the holder of the ATTs is not the developer of the ecological application on the AirTrade protocol, he/she can rent the held ATT to other developers of ecological applications and earn a certain rent with the benefits of the ecological application. The developers of the ecosystem application who lease the ATT can get the right to use

it and deposit it into a margin contract to obtain a corresponding TP, thereby enhancing their service capabilities of the business.

Based on the authorization mechanism, a professional institution will be created, similar to the Token Bank: accepting Token investment from the holders and giving a certain return on investment. Meanwhile the Token Bank can provide Token rental service to developers. Developers do not need to purchase a large number of Tokens. They can flexibly adjust the amount of leased Token and the proportion of application revenue willing to pay, at any time and according to their needs.

## 7.2 Token Obtain

The token economy system of AirTrade protocol follows the rules of the system initial design and is executed by smart contracts to guarantee the rights and interests of all participants and the future growth of the ecosystem. When more than two-thirds of the node representatives raise objections to the economic system, the AirTrade protocol will hold a community conference to develop a plan to modify the economic system.

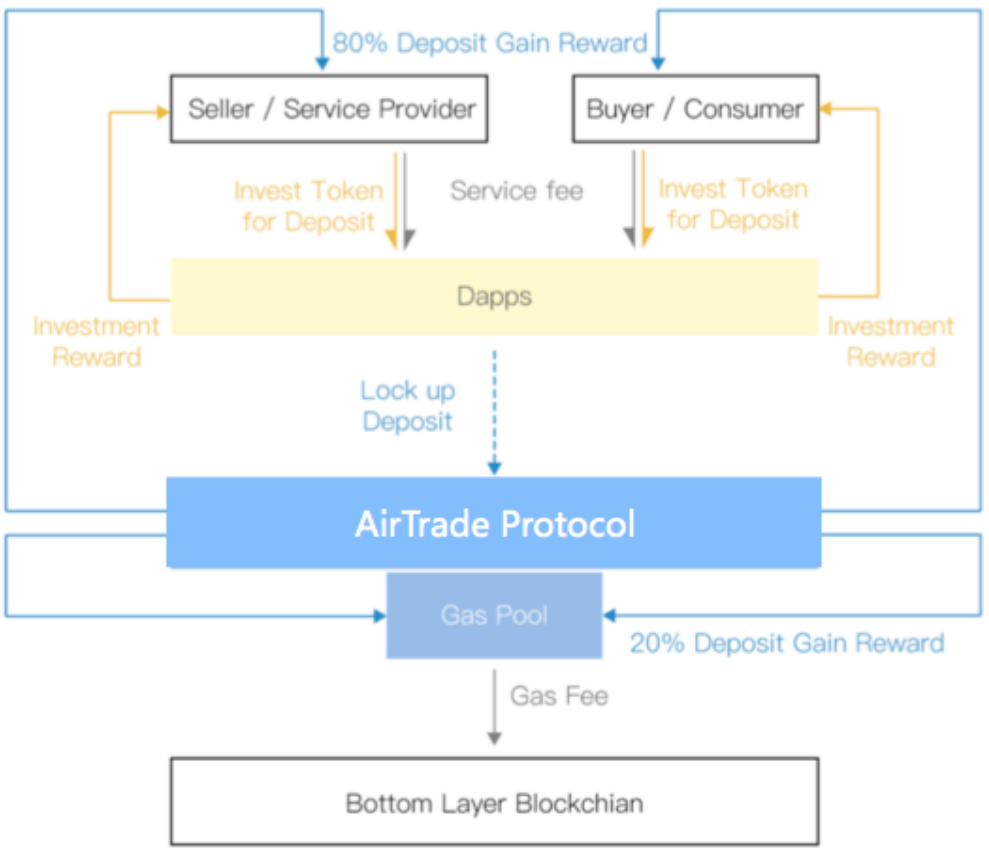


Figure 10. Token economic system circulation mechanism

### 7.2.1 Release Mode

**Volume: 50 billion**

- Never increase, no inflation
- All tokens have been pre-mined and no mining is required
- The user's transaction behavior in the ecology replaces mining activities to obtain token rewards

**Token Distribution**

- 30% for public sale
- 20% for private sale
- 10% for AirTrade team
- 10% for early partners and consultants

- 30% for market operations

**Fund Use Planning**

- 40% for development of platform and products
- 25% for building technical infrastructure
- 12% for marketing and user operations
- 12% for testing and bug awards
- 5% for legal fees
- 6% for operations and management

### 7.2.2 The Underlying Blockchain Platform Gas Costs

The AirTrade protocol will establish a Gas Pool to cover the gas costs incurred by the AirTrade protocol using the block trusted computing environment.

In the future, we will develop a blockchain that supports the AirTrade protocol, to reduce the gas costs to infinitely close to zero. The AirTrade protocol chain is also an application of the AirTrade protocol ecology. It is also possible for Token holders to invest to form margins to make the system start working as quickly as possible.

### 7.2.3 Ecological Application Incentive

The AirTrade protocol will encourage more developers to join in and contribute to ecology. The top 3 of TP consumption will be excellent applications in the AirTrade protocol ecosystem, and each year will receive a certain Token award.

# 8 Performance and Practice

## 8.1 Stage One - Build Protocol Basic Functions

The research and development goal of stage one is to fulfill the basic framework of the protocol and the basic functions of the contract group, making it possible to perform the transaction safely and reliably without third-party involvement.

The research and development in this stage is divided into two parts.

The first is to form the interaction specification of the protocol, and provide a collaborative basis for the research and development of the underlying contract and the upper-level API.

The second is followed by the development of basic functions of the underlying contract. The key task in this part is to build a simple and efficient trading mechanism and incentive mechanism, providing a simpler and more efficient participation path for the participation of future community developers, meanwhile, allowing more users to read and understand trading rules and incentive mechanisms, in order to facilitate the emergence of consensus value.

## 8.2 Stage Two - Implement Batch Processing and Optimize Processing Capabilities

The research and development goal of stage two is to optimize the processing capacity of the protocol. Since the initial protocol was built in Ethereum's trustworthy computing environment, the protocol performance was limited by Ethereum's processing capabilities. Therefore, regardless of the optimization of Ethereum's performance and the migration to other platforms, the AirTrade protocol needs to be optimized accordingly to meet the needs of the protocol's ecological growth.

The research and development of this stage will adopt the approach of batch processing of multiple requests, which will effectively increase processing capacity. Although Ethereum's time interval between gas and consensus mechanisms will still bring users an inadequate user experience, this stage will greatly improve the concurrent processing capabilities of AirTrade. The actual AirTrade protocol processing power calculation method is as follows:

$$A = n*k$$

Among them, k is Ethereum's processing capacity; n is the number of processing requests submitted in the same batch under batch mode; A is the actual processing capacity of AirTrade protocol, and the unit is tps. According to Ethereum's current data which is approximately 20 tps, the batch processing goal of the AirTrade protocol is 1,000 requests/batch, so the theoretical processing capacity of its protocol will reach 20,000 tps.

The security aspects of batch processing are not impaired due to the implementation on the blockchain. The cryptographic-based signature mechanism will guarantee the security of each request. In addition, the transaction protocol itself regulates the transaction process, which will also prevent the trade-offs after batch processing.

## 8.3 Stage Three - Reduce the Frequency of Clearing and Settlement and Increase the Time Efficiency in Chain Processing

The research and development goal of third stage is to improve the processing efficiency of the the product layer based on the protocol, allowing users to obtain a near-real-time processing experience. Since the uplink data needs to reach the consensus of all nodes in the entire network, the entire process takes a lot of time. However, during the process of trading, there is a large amount of demand that does not require reaching a consensus on the entire network. It only needs to reach a consensus among the parties to the transaction. Therefore, the transaction protocol itself and its interaction specification have a lot of space for optimization.

The research and development of this stage focus on the transaction aspect that can be delayed in the process of trading, using cryptographic methods to enhance transaction security, and then reducing the frequency of clearing and settlement on the blockchain by means of off-chain processing, so that users can gain more effective feedback.

## 8.4 Stage Four - A Public Blockchain Creation Protocol Based on the DPOS Consensus Mechanism such as EOS

Due to the limited performance of Ethereum, the maximum processing capacity at Ethereum can only reach at most 20,000tps, but the EOS mainnet will become the parent blockchain with better performance after it is launched. The DPOS's consensus mechanism will allow EOS to achieve millions of tps per second. It is the performance that has approached centralized control, which greatly enhances the user experience and processing capabilities of the product. AirTrade will migrate the protocol after the EOS mainnet is launched.

## 8.5 Stage Five- Launch AirTrade Blockchain

While all the business requirements and needs will be met on the AirTrade’ s parent blockchain, other completed services in the public blockchain will also be migrated. AirTrade will be the first one in the blockchain field that builds a public blockchain centered on the e-commerce industry. It will transform the production relations in e-commerce, which greatly promote the production efficiency and eliminate unnecessary third-party links in the traditional field. By using the features of the blockchain to change the trust mechanism, AirTrade will make the transactions simple and reliable. Its economic model system opens up the entire industry, allowing all participants to become shareholders and community contributors.

We believe AirTrade will become the world leader in the next generation of e-commerce.

# 9 About the Team

## 9.1 Team

**Eric Lee**

- Serial entrepreneur, 5 years
- Established a global mobile marketing platform to serve 100+ mobile game publishers with an annual flow of 300 million RMB
- Established mobile cross-border e-commerce platform, google play new product top 1, free application list fifth, total users 1 million +
- DEMO CHINA Entrepreneurship Competition No. 2
- Black Horse Competition Top 10
- Joined the well-known incubator, 500StartUp, in the United States
- Obtained tens of millions of investments from 4 top institutions

**Emily Liu**

- Extensive Internet marketing and management experience, successful experience in e-commerce and software, especially branding.
- Accumulated 10 years of personnel management experience, a strategic thinker and planner, excellent multi-tasking capability
- Served as the senior director of JD.com, responsible for the marketing of JD.com
- Responsible for mobile game marketing at Tencent, in charge of several best-selling mobile games in China, contributing huge revenue to Tencent

**Michael Wang**

- One of the founders of the cross-border e-commerce platform BellaBuy, a female mobile shopping platform targeting Europe and the United States, once received investment from a famous angel investment agency.
- Served as the youngest regional director of Alibaba's B2B division, led the team in the performance evaluation of all regions in the country and won the first place
- Served as the senior director of the Alibaba Group Alipay Department, responsible for Alipay’ s national promotion work

**Gaby Meng**

- Serial entrepreneur, 7 years
- Established a cosmetic mobile application platform and received application recommendation on App Store with more than 1 million users
- Built an ASO promotion platform and served 300+ Internet companies with 1 million users and a monthly flow of 9 million RMB, covering China, Australia and North America
- Invented interactive pricing social products with 250 thousand daily active users
- Received tens of millions RMB from several top venture capitals in China

**Andrew**

- Acted as the director of operations at TOWNFORSTINC, responsible for the entire e-commerce operation process, helping the company to create sales of 4 million U.S. dollars/month
- Served as senior director of operations at AMAZON, responsible for the overall service of AMAZON merchants, with an average of 20% increase in sales per month for service businesses, creating a number of scientific operational processes
- Joined the Bglamor cross-border e-commerce platform as a partner to help the company obtain financing and explore the European and American markets successfully

**Jackson**

- Served as a senior algorithm engineer at Facebook, responsible for the online advertising department
- Expertise in big data and algorithm related technologies, able to maximize system performance through technical means.
- Worked at Yahoo for 5 years

## 9.2 Advisors

**Daniel Xie**

- Served as the youngest product director in Microsoft (China), responsible for the development of Microsoft office in China.
- Established Wanzhuangsifang, China's first geo-based social software, attracted 5 million users

**Kevin Wang**

- Served as an Executive Director and Chief Financial Officer of Kingsoft (HK3888) from 2005 to 2011
- Worked for Ernst & Young and PricewaterhouseCoopers from 1997 to 2005
- Held a MBA degree from Victoria Polytechnic University in Australia
- Established Ameba Capital, which has invested in numerous unicorn companies such as Mogu Street, Kuaidi, Chemanman, Hot Body, etc.

**Arthur Chen**

- Served as CEO of Lieyun Finance, a well-known blockchain media in China with more than 8 million users

**Yu Chen**

- Served as Managing Director of Yunqi Capital, responsible for investment in artificial intelligence and blockchain direction projects
- Implemented Limei, the first DSP platform in China
- Served as investment manager in IDG, responsible for TMT industry investment
- Served as an engineer in Google

**Oliver Lee**

- Served as General Manager of Defengjie Capital, focusing on investment in the blockchain field

**JiaXi Lin**

- Served as the managing director in Guo Jin Capital, in charge of the largest mobile game investment institution in China

**David Luo**

- Served as VP in Dexun Capital, which was founded by Tencent founder Zeng Liqing and is one of the most active angel investment institutions in China

**Marry Nan**

- Served as CEO and publisher of Cyzone and co-founder of Cyzone Angel Fund.
- Held a bachelor's degree of Hunan University and an IMBA degree from Tsinghua University and Massachusetts Institute of Technology.
- Accumulated extensive experience in venture capital
- Joined Zero2IPO Group in 2001 as a Managing Director, founded and directed research, business development and investment banking businesses
- Worked for "China Economic Herald" and China Venture Capital Limited

**Weili Zhou**

- Held a MBA degree from Renmin University of China
- Served as chairman of Qingdao Daxie Technology Investment Co., Ltd.
- Founded Qingdao Anfulan Venture Capital Co., Ltd.
- Founded Anfulan (Hong Kong) Co., Ltd. in 2004
- One of the Most Potential Professional Investors in China's Private Capital Market

**Ke Wang**

- Held a master's degree from University of Pennsylvania
- Served as Executive Vice President in Tairong Capital Partners
- Served as Senior Director in Zhong Zhi Group
- Served as VP at China Investment Co., Ltd.

**TaiLun Zhan**

- Founded Nimo Venture and invested in several well-known oversea projects
- Served as Investment Director at JJWorld, participated in investing in several well-known O2O projects

# 10 Development Roadmap

**2018 Q3: Complete stage one**
Complete core contract components such as asset escrow contracts, arbitration guarantee contracts, and token economy contracts

**2018 Q4: Complete stage two**
Improve the contract group and use batch processing to optimize processing performance

**2019 Q1: Complete stage three**
Optimize the core protocol

**2019 Q3: Complete stage four**
Complete public blockchain deployment; improve all protocols and interactions; optimize call processing capabilities and effectiveness

**2019 Q4: Complete stage five**
Launch the mainnet

## Risk statement

This is a conceptual document ("white paper") that describes our proposed AirTrade protocol and ATT token. It can be modified or replaced at any time. However, there is no obligation to update the white paper or provide the recipient with any other information.
Reader's notice is as follows:
Not for all personnel:
AirTrade protocol and ATT tokens do not apply to all personnel. Participation may require a series of steps, including the need to provide certain information and documents.
No regulated products are provided in any jurisdiction:
ATT tokens are not intended to constitute securities or any other regulated products in any jurisdiction. This white paper does not constitute a prospectus and has not been reviewed by any jurisdictional authority.

Not recommended:
This white paper does not constitute an opinion as to whether it should participate in the AirTrade protocol or purchase any ATT tokens, nor does it constitute a basis for any contract or purchase decision.

English version is preferred:
This white paper is only available in the official English version. Any translation is for reference only and has not been proven by anyone. If there is any inconsistency between the translation and the English version of this white paper, the English version shall prevail.

You must take all necessary professional advice, including taxation and accounting. We hope the AirTrade project will be very successful. However, success cannot be guaranteed. Digital assets and platforms involve risks. You must assess the risks and the ability to take risks.