Powered by Blockchain, driven by Communities.

WHITE PAPER Beta Version 1.1 June 2018



WABA.network A network of decentralized economic hubs Powered by EOS



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Executive Summary

WABA.network is an open source platform that allows the creation of economic hubs. Allowing each community to tailor their own market, currency, monetary system and governmental policies. In addition to its approach to complementary monetary systems, WABA.network provides hubs a unique and transparent solution to target triple impact objectives (social, economic and environmental).

Community currencies are one of the most creative proposals that many communities have adapted to satisfy needs not met by mainstream currency. The variety of complementary monetary systems allows the achievement of a broad array of specific objectives (for example, promoting recycling, creating more employment, etc.). Blockchain technology can boost complementary currencies mainly in two ways: by providing a technological infrastructure that makes their use practical and easily scalable, and by offering a decentralized governing system that provides each user a higher level of involvement.

At WABA.network, the preliminary study that a community is required to do before the implementation of its own token becomes accessible at a very low effort – communities can quickly design, test, and scale their currencies and markets by directly modifying the monetary and government systems' parameters. Additionally, the flexibility of the platform will allow them to adapt the structure of their currencies to the new challenges that they might face.

Since the open source model requires the support and collaboration of the community and individuals it aims to serve, it was decided that a token distribution event combining a sale with a selective airdrop is the best way to create the conditions that favour the growth of the platform.

The WABA.network Token (WNT) is the device that will allow communities, developers and community currency architects to use the WABA.network platform and to work cooperatively in the development of new monetary and civic tech system, thereby making of the platform a decentralized organization. Communities will use the WNT to gain access to all the features provided by WABA.network platform. Developers and community currency architects that work in conjunction with communities, helping them in the development of new systems and features, will be rewarded with WNT.

The WABA.network Genesis Contract will mint 1.000.000.000 WABA.network Tokens (WNT) in November 2018. The goal of the pre-sale stage is to raise USD 726,000. These funds will assure maintenance to the actual project, development and implementation of an MVP for forthcoming TGEs, as well as legal affairs and marketing.

The contribution period will distribute a total of 400,000,000 WNT. This process will last 15 days and will be open to any potential user wishing to obtain WNT. Early contributors acquiring tokens in the pre-sale will receive a discount that will range from 50% to 30% (depending on the time when they make their investment). And later stage participants will be able to acquire WNT at a preferential rate according to the stage of the presale they choose to partake. Tokens will be frozen until the end of the distribution period, after which they will be assigned to the wallets of those who have acquired them.

We firmly believe that we are heading towards a future of multiple self-managed tokens, each of them designed to perform a specific function.. With the WNT, communities can create their own currencies and expand their networks in an affordable, secure, and accessible manner never before available. WABA.network stores potential value on the decentralization Blockchain technology provides, allowing users to reach higher levels of material and spiritual well-being.

Introduction

Complementary Community currencies represent one of the most creative solutions that communities have found to meet the needs that mainstream money does not fulfill, A complementary currency is an agreement within a community to accept as a medium of exchange a currency with no legal tender status. They are called "complementary" because their aim is not to replace the legal tender but to perform functions that the latter is not always able to deliver. Community currencies have proven to be effective in dealing with three obstacles hindering the pursuit of the communities' goals: the lack of money and/or credit, the prevalence of misaligned incentives within the communities' economic and social actors, and the competition of outsiders (like transnational corporations, large chain stores, etc.)

The Blockchain technology can boost complementary currencies in three major ways. First, it can provide them with a technological infrastructure that makes their use practical and easily scalable. Second, it offers communities a decentralized governing system for their currencies. Thus, anyone can participate in the organization of the community as long as it holds its tokens (the units of the complementary currency issued by the community). The possession of tokens gives their owners the right to take part, collaborate, propose, rate and vote on issues that are relevant for the underlying community. Third, it can create incentives to make communities, software developers and "complementary currency architects" join forces to develop new solutions that help communities achieve their goals.

This way of organizing communities, also known as open source organizations, is meant to democratize ownership and decision making. The fact that the totality of this ownership is distributed among token holders implies that all the value created in the community is kept within, with no tensions between the stakeholders (interested in the growth of the community) and shareholders (who aim at extracting value). In an open source organization we are all stakeholders whose incentives are mutually aligned in pursuit of the goal that we have all agreed upon.

Autonomous and sustainable communities need to control the money used by their inhabitants and ensure that its design is aligned with its goals.

WABA.network combines the creativity of the various complementary currency systems with the power of open source organizations to build a complete platform capable of creating tokens that enable the pursuit of communities' goals.

Zones and Communities

WABA.network is comprised of zones. Each zone is delimited by its main goals (e.g., foster local purchasing, full employment of its citizens, production of renewable energy, promoting the care of the environment, etc.). Within each zone many communities can coexist, each of them with its own token and governing system. A multilateral clearing system allows for the interaction of the communities lying in the WABA.network, both within and between the different zones.

The WABA.network platform is designed to allow every community to easily launch its own token and governing system. This monetary and governing technological infrastructure is complemented with easy-to-use and modular interfaces, such as an online marketplace and a mobile wallet through which users can interact. All the parameters defining the economic and governing features of the community can be customized in the WABA.network platform in the way that best fits the community's goals. Further details on the variety of monetary and governing systems are provided in the WABA.network Framework section.

Local Economy Zone: the case of Discoin

It has been lately pointed out that millennials tend to appreciate more the singularity of local products than the standardised supply provided by large firms. Local shops can be supported by means of a token that grants certain benefits for those who consume their products. As long as the usage of the token is restricted to the net of local shops, the wealth generated can remain within the community, A buy-local token also has the ability to remove the middlemen that extract value from the connection between customers and sellers. As a result, the price paid by clients is reduced without eroding the producer's profit.

Discoin is a token developed for a group of shops in the city of La Plata, Argentina. Even though it was initially restricted to a group of craft breweries, it quickly gained attention from other shops. Discoin operates in a simple way: when customers pay with Argentine pesos they get a refund in Discoin (the size of the refund is decided by the shops that grants it). Once they have accumulated a sufficient amount of Discoin, customers can spend them in any of the shops of the network (each shop announces the percentage of a sale that is willing to accept in Discoin). Thus, Discoin ends up operating as a discount. When shops issue Discoin they get a negative balance in their accounts. When they accept them in exchange for their products, they receive a credit in their Discoin account. Shops should tend to have a balanced position.

Discoin nominal value has been set 1 to 1 to the Argentine peso. Discoin not only helps to keep the wealth of La Plata within its limits, but also enables a larger number of transactions compared to the situation prior to release.

Social Economy Zone: the case of MonedaPAR

The social economy zone comprises all the communities that seek to increase production and contribute towards socially-inclusive wealth creation. The goals of the actors participating in the social economy generally aim at full employment attainment and basic needs satisfaction. The governing philosophy embedded in the social economy is fully aligned with the structure provided by open source organizations.

The first community that has been launched into the WABA.network is MonedaPAR, a complementary currency based on Blockchain technology meeting not only economic but also social needs. This program is based on the mutual credit system philosophy and materialized under the form of LETS. Thus, the issuances of PAR are not backed by a certain asset like gold or the legal tender. Every PAR that is issued is backed by the transactions that take place within the community. Tokens are like a voucher for an existing product or service, or future ones. One PAR is worth for one Argentinean Peso.

The program was launched in January 2017 and is currently in the process of expansion and consolidation. So far the following features of the monetary and governing system are already operative. First, there are three types of overdraft margins, each of them given by the different types of users that constitute the community: self-employed, small producers and companies. The levels of these overdrafts are currently predetermined. The existence of the overdraft implies that in order to purchase goods and services within the community users do not need to have previously accumulated a positive stock of PAR. Second, overdrafts are acquired by means of endorsement. The existing members of the community are allowed to invite new members upon agreement of the executive committee of PAR. The distribution of these endorsements is made through the electronic wallet developed by WABA.network (the same that is used for making transactions). Thus, it is always possible to verify the distribution chains of endorsements and the economic performance of the clusters that these invitations gave rise to.

Third, the transactions within the community are made on a P2P basis through an electronic wallet that works on smartphones. No middlemen are required. All the transactions carried out in PAR are registered on the Blockchain, making them public, transparent and secure. In order to facilitate the meeting of producers and consumers a digital marketplace has been developed.

Currently, a promoting team is working on the development of the nodes of the network. Thus far, it has been welcomed in municipalities, the industrial sector, the cooperative sector, MSEs and social organizations. According to the information collected by the promoters of PAR, its potential utilization would add up to 10% of Argentina's GDP, which is estimated to be the share of the cooperative sector in the overall economy.

Circular Economy Zone: the case of JellyCoin

A sustainable economy implies a development model that integrates the economic, social and environmental goals of the community in a way that the needs of the present are satisfied without jeopardizing the wellbeing of future generations. The fact that certain activities are not considered profitable for the market does not imply that they are incapable of producing valuable goods and services for the whole. On the other hand, some activities may be considered profitable because their costs, instead of being internalized by the producers, are transferred to the community as a negative externality. The development of a mechanism that is capable of aligning the behaviour of the diverse actors that make up the community in a way that is consistent with the common good cannot wait any longer.

The COLMENA Project (the spanish word for "hive") is framed within the circular economy approach. It seeks to take advantage of valuable resources that the community discards to transform them into sources of work for those not integrated to the capitalistic market. By means of the collaborative recycling of plastic waste at the local level and the subsequent manufacturing of new products with recycled plastic, a virtuous economic loop is created. The cornerstone of this circuit is given by the Jellycoin, a token specifically designed to reward those who contribute to the growth of the system (be it by source separation of residues or their delivery to recycling centers). In order to involve the whole community, not only households are invited to participate, but also local businesses, social organizations and the government. The project is being developed in the town of Campo Viera, in northeastern Argentina.

Jellycoin is designed in such a way that anyone that takes the (previously classified) residues to the recycling center is credited with tokens. These tokens can be used either to consume at the local shops or to pay local taxes. When the Jellycoins are transferred to the government as taxes they are burnt (otherwise, the monetary mass would tend to increase infinitely since the production of residues is a continuous flow). The government is willing to reduce its income in legal tender since, as a result of the implementation of Jellycoin, some of the expenditures related to waste management will be saved. Thus, Jellycoin not only encourages people to behave in a more environment-friendly fashion, but also strengthens the local trade circuits.

New Economic Hubs Creation Platform

The WABA.network will be comprised of smart economic hubs connected in a global scale.

To enable communities to create their own economic hubs and define their monetary systems and issuance mechanics, the WABA.network Creation Platform will provide them with an easy interface to design and deploy their economic hubs on the WABA.network ("creation wizard").

The platform will include templates of monetary, market and governing models to support the needs of a wide variety of communities. These templates can be parameterized and adjusted to the local requirements of the community.

Since WABA.network will work as an open source organization it will be possible that its users add new features to the existing monetary and government systems, or create new ones from scratch. Those who contribute to these developments will be rewarded with WNT.As the WABA.network community develops new varieties of smart economies, the new modules will be available at the platform for new communities to implement them.

As a result, the creation wizard will facilitate an intelligent economy composed of customized smart contracts that rule the monetary issuance and the governing system, as well as a marketplace and wallets to carry out the transactions, both web and mobile.

WABA.network Framework

The WABA.network Framework is an open source framework comprised of EOS smart contracts and front-end libraries that allows communities to create and issue their own currency with its governing system.

The technological infrastructure that determines each community's operation is controlled by a combination of common smart contracts (shared by all the communities in the network). There are, however, specific smart contracts that each community (or group of communities) will require according to the nature of its (or their) goals. Similarly, the built-in interfaces of the network will be reusable throughout communities. These interfaces include a digital wallet, an online market and a control panel.

WABA.network seeks to host, interconnect and scale up a wide variety of complementary economic systems that in the recent years have been being developed. In order to make this possible, WABA.network is designed as an open and extendable modular platform that allows communities to rapidly prototype and test their own money and governing system in such a way that the onboarding process is successful.

Monetary systems

Currency design is a key feature of the WABA.network Framework. Through a set of smart contracts and easy-to-use setting tools, communities will define and customize the properties of their currency. Unit of account, denomination, circulation (the issuance and destruction rules as well as the mechanism through which the currency is put in circulation), reserve criteria, demurrage, bonus/malus, etc. will be customized by the community according to its goals. The platform will offer, however, standard preset designs: LETS, mutual credit, C3, time banks, IOUs, loyalty schemes, etc.

Mutual Credit (Moneda Par)

By means of a Mutual Credit, the different actors within the economy (self-employed, SMEs, cooperatives) can generate a credit system for the members of a given community with no need to rely on the traditional banking system.



The participation is voluntary. When entering the system, one can access to credit at a zero interest rate. The sole requirement to be granted an overdraft is to show the capacity to give the community own production for an amount that equals the value of the credit that is being demanded.

When a member is granted a credit or overdraft, she is not given a positive balance but the possibility to spend and remain with a negative balance up to the defined amount. The fact that someone is holding a negative balance necessarily implies that another member of the system is holding a positive balance. It must always be the case that the sum of all balances add up to zero, implying that there is no financial wealth within the system. Money is just a tool to keep track of transactions and enable exchanges to take place.

If a member of the community wants to sell sandwiches, she can request a credit (since they will return the value by selling these sandwiches). When the community grants her the credit, she can therefore buy the bread, ham and cheese and whatever is needed to prepare the sandwiches for the other members of the network. When all the inputs have been purchased, the wallet balance will be negative, for example -238 token units. When the member finally sells the sandwiches, she will be able to return what she borrowed from the community, and spend the difference (profit) on whatever she wants.

Loyalty Programs (DisCoin)

The loyalty program generates a platform where retailers members can offer discounts to their customers through token delivery. These tokens serve as a local purchase voucher.



Each retailer joining the network receives a defined quantity of tokens. Each time a customer buys a product in pesos, the retailer will refund a part of the price in tokens. For example, if Pedro buys 100 pesos worth of products in a shop that offers a 20% refund rate, he will receive 20 tokens in return after the transaction.

The retailers, in return, commit themselves to accept tokens as a means of payment for their products, offering discounts to their customers. In this way, if Pedro needs to spend 100 pesos in a store that offers a 10% discount rate, he will be able to pay with 90 pesos and 10 tokens instead of 100 pesos.

As long as the currency is only accepted by retailers of a specific region, the system can succeed at stimulating the local economy as the generated wealth remains within the community, Such an alternative is more beneficial than the banks discount schemes financing the consumer's retail purchases, that end up draining savings out of the region. By means of this token local shops can do away with traditional intermediaries that offer discounts and extract value from the connection between customers and vendors. As a result, the price paid by customers drops, without grinding the retailers profits down.

Municipal Currency

This currency allows a municipality (or state, province, etc.) to issue its own token in order to stimulate the local economy, promote good fiscal behaviour and, more generally, to support all actions contributing to the common good.

When a household within the municipality does a positive action (such as paying taxes in time, or participating in community projects), the government grants it a certain amount of tokens. Why are these tokens useful? First of all, because the municipality is committed to accept them as part of the payment of municipal taxes, instead of the legal tender (pesos). Furthermore, households can use tokens to access to discounts offered by local retailers that are members of the network; it's a way of retaining more wealth and make it remain within the community,

Retailers have an incentive to participate in the network and accept tokens, given that these tokens can also be used to pay a part of the local taxes. Furthermore, they can buy products from other companies, or pay the salaries of their employees. On top of that, the companies can use tokens as a loyalty tool, reintegrating tokens to their customers when they purchase in the legal tender,. The Municipality has full control over the token emission and distribution, as well as all parameters defining the overall system performance (for example, which behaviour is rewarded, how many tokens are distributed for each positive action).



C3 Commercial Credit Circuit

The C3 is a credit system integrated within a network of companies, Each company that joins the system can buy products by issuing tokens that have a fixed 1 to 1 parity with the legal tender currency. This transaction works as a zero-interest rate credit: the company that purchased products by issuing tokens must pay the system administration, within a predetermined period of time, the amount of legal tender equivalent to the number of tokens it had issued,

Each token is associated with a certain credit, with a fixed due date, When a company has tokens that have reached their expiration date, it can exchange them for legal tender with the administration. Companies have a limited quantity of tokens to issue,

For example, the Perez company may not have enough liquidity to buy goods, worth of 5000 pesos, that are produced by the Rodriguez company. Instead of resorting to a traditional banking system credit, Perez can give Rodriguez 5000 tokens, due in 90 days, in exchange for the goods,

The purpose of this system is that all tokens issued by Perez serve as an internal means of payment: they can be exchanged for products from the other companies in the system, Therefore, within the next 90 days, Rodriguez can use the tokens to acquire products from any other retailer. At the end of the 90th day, the Perez company must handle 5000 pesos to the administration in order to pay off its debt, At that time, the companies holding the tokens initially issued by Perez can swap them to the administration in exchange for the corresponding amount of pesos.

The C3 system is also useful in cases where a company in the system (company A) sells to another company (company B, that may or may not be part of the system) on a forward basis, Instead of having to wait for this period to elapse before such liquidity becomes available, company A may issue tokens on the basis of such a credit sale.



The tokens will circulate as a means of payment within the system, and whoever owns them by the end of the term may redeem them in exchange for pesos, These pesos will come from the payment initiated by company B.

Since the tokens issued within the system work as an internal means of payment that is accepted by all participants, the companies can successfully access to short-term credit, at a zero interest rate.

This result is highly beneficial for companies in order to make full use of their productive capacity, especially at a time when the credit offered by the traditional financial system is limited and expensive, In this way, the C3 increases liquidity in local markets and stimulates the local trade.

Time Banking

In a Time Bank community members provide services in exchange for tokens representing hours of work, All participants' hours of work have the same value; one cooking class hour is equal to one childcare hour.



The time bank works as a mutual credit system (link to mutual credit) in which the unit of account corresponds to the hours of work: participants can access to credit in order to purchase services from other participants, on the condition that they commit to provide hours of their own work to pay off their debt. Each participant should aim for the amount of hours purchased from the rest of the community to be equal to the amount provided by the community.

In a Time Bank, a bricklayer can take 5 hours of guitar lesson, as long as he has offered 5 hours of his own work at another participant's house, Alternatively, he can go into debt to take these guitar lessons, committing himself to offer his time later.

Renewable Energy

The Renewable Economy Zone enables the creation of an intelligent energy micro network in which the generation of energy from renewable sources is rewarded with tokens. The participants can buy and sell solar energy to each other through a platform that records all data regarding the generation and consumption of each member, as well as all transactions.



In particular, some households can generate their own energy with photovoltaic panels, If they produce more than they need, they can make this surplus available to the network and get as many tokens as KWs they have delivered. These tokens serve as a complementary currency within the community: they can be used to purchase goods or services from local businesses, or from other households that do not have the capacity to generate energy,

Any user who owns tokens can use them to get energy from the network. Users who do not generate energy can go into debt within the system to consume energy from the grid. To pay off that debt, they must get tokens by offering their goods or services to the rest of the participants in the community.

In order to facilitate the exchange of products, the KW balance of each user is also expressed in the legal tender currency (referring to the KW market price). The unit of account for exchanges would then be the legal tender, but the currency of the system still remains a quality store of value since it is denominated in KW.

The renewable energy zone isn't only beneficial for the environment, but also serves a stimulator for the local economy. The system also contributes to the autonomy of a city, taking into account the advantages of intelligent grids for the management of outages and the reliability of the electrical system,



The fact that some activities are not considered profitable by the market doesn't imply that they would be unable to produce valuable goods and services for the society,

The aim of the Circular Economy Zone is to take advantage of the valuable resources that society discards in order to transform them into useful products, and into a source of income for community members, This can be achieved through the implementation of a token that rewards those who contribute to recycling,

All the members of the community who collaborate in the recycling process (households separating at source, or collectors transporting waste to recycling centers) are paid by the system with a token that indicates the quantity of waste, in kilos, they've brought. The recycling centre uses the waste for the production and sale of "green inputs" for industries.

The token generated by the recycling centers is useful because it can be used for everyday transactions: households and collectors can use it to purchase products from local businesses, and even to pay local government taxes, Local businesses, once they received the tokens, can also pay a portion of their taxes with tokens or buy products from other businesses,

By accepting tokens as part of tax payment, the government forgoes income in legal tender, However, this is compensated by the savings that result from the drop of the outlays in legal tender that the current (inefficient) way of waste management entails, The system can be designed so that the government can improve its balance sheet, even when it forgoes a part of its revenues in legal tender,

Through this virtuous economic cycle involving waste management, the community products and a special purpose token make that the behavior of the various actors are aligned in a way that benefits the environment, the local economy and the common good,

Government - Decision-making module

The operation of each monetary system is regulated by a set of parameters. The modification process of these parameters shapes the governing method of the monetary system. Technology allows governing to be exercised through the vote of either one, several or all members of the economic node. The characteristics of each government system depend on the following aspects:

Governing method (who votes?)
Voting mechanisms (how do you vote?)
Purpose (what is voted?)

Governing method (who votes?)

The economic nodes, when introducing the system, can choose between the following governing methods:

Autocracy:



A single account governs and controls the monetary system and is able to set all its parameters over time. This government method can be used, for example, in the case of a currency based on discounts implemented by a single trade. It can also be applied to cases in which, although the decisions regarding the parameters of the system are made by a single administrator, the latter can appeal to the users for consultations (non-binding referendums) in order to have more information to take a decision. This method could apply to a municipal currency for example.



A small set of accounts, previously defined (although modifiable over time) governs the monetary system. Each decision regarding the parameters may require the consensus of all the governing accounts, or the positive vote of a minimum number of accounts. For example, a group of businesses can create a system to encourage to "buy local". The founding members define the system's characteristics and modify the parameters over time. Those joining and taking part must accept the previously defined rules. Just like in the case of an autocracy, administrators can appeal to members for consultations as an information mechanism for decision-making.

Representative government:



All members of the system have the right to vote on decisions regarding the system parameters, although this voting is carried out indirectly. Each member votes for a representative (who must be previously candidate) to represent them on all matters relevant to the monetary system, during a fixed period of time. Members can also vote for "executives" who will be authorized to make decisions without the need to appeal to the group of representatives.



All members of the system have the right to vote on decisions regarding the system parameters, without the possibility to delegate. At each voting instance, voters can choose whether to exercise their right to vote or opt for abstention.

Liquid Democracy:



A combination of direct democracy and representative government where each member can decide whether to abstain, vote directly or delegate their vote to a representative when voting for a decision that the node must take.

In a democratic system all members have the right to vote, by definition. Therefore, the definition of the conditions that make an individual a member of the economic node is crucial. In general, the criterion used is the possession of the node's tokens, either at the moment the vote is carried out or at some point during a certain period. Defining the node members this way can lead to different levels of equality, since the voting systems can be weighted by the possession of tokens (in which case the system would derive in a combination of democracy and oligarchy) or unweighted.

It is important to note that communities may choose to modify their government method over time, or even choose different systems depending on the decision they wish to make. As an example, the account that governs a autocratic system may decide to submit a government decision to be voted directly by all or some of the participants in their community. Similarly, a community governed by a direct democracy may decide, through the vote of its members, to delegate indeterminately the decision-making process regarding a specific parameter to a reduced number of accounts.

In general, the different variants of democracy will be applied to the economic nodes linked to the social economy area, where community development is carried out horizontally, from the bottom to the top.

Voting mechanisms (how do you vote?)

When the economic nodes apply a specific voting process, the voting protocol of WABA.network will allow its members to forward proposals in order to modify the parameters of the economic system and / or the government system.

Each proposal is made up of two parts: the suggested alteration and the minimum approval levels required for the change to be effective (for example, simple majority, two-thirds or unanimity). Each time a member submits a proposal, the rest of the community decides whether the proposal becomes a poll by approving or rejecting it through their votes. The members must also choose the minimum level of approval they consider relevant during this vote.

If the proposal reaches a certain percentage of the votes - defined when the node is created - it effectively becomes a survey by which community members can vote on the suggested change. The minimum approval level for the change to be effective will be the one that received the highest number of votes. The node administrators (either one, several or all members) can also modify the parameter corresponding to the minimum number of votes needed for a certain proposal to be taken to the survey phase.

The quantity of voters qualified to participate will be established at the time of the proposal approval. Communities can set the period of time during which voters can participate in a survey, with a minimum of 7 days and a maximum of 30 days.

Once a survey has been carried out, the change then becomes effective if the required amount of votes has been reached, according to the minimum approval level. The corresponding parameters will be modified after a week and should remain unchanged for a minimum period of time that was previously stipulated when the node was launched. Any new proposal regarding the updated parameters can be brought to a vote, once that time has elapsed.



Functions (what is voted?)

During the voting process, members can forward proposals related to all the parameters that define each monetary system, such as oxidation rates and periods, overdraft limits, interest rates or penalty mechanisms (see subsection Monetary Systems to access to an extensive list of the parameters of each economic system). In some economic systems, the proposals may go beyond the adjustment of parameters. For example, in credit-based systems communities can vote to select and revoke agents. Similarly, in systems that require the existence of oracles, WABA.network framework will offer a protocol to parameterize their use: communities can establish they would be elected, how long they would remain active, what authorizations they would be granted, among others.

Members can also vote on the parameters that define the same voting processes for example, the percentage of votes needed for a proposal to become a survey, the minimum duration in which the changes should be implemented, the duration of the voting process or the criteria under which the right to vote is granted. The members of each economic node can also vote to create blacklists, in other words frozen accounts unable to operate.

Virtual Wallet

The WABA.network framework makes mobile and web wallets available to communities, with the objective to carry out their transactions under all standard mechanisms that are commonly and widely used.

The wallet will allow members to carry out transactions with any of the tokens created on the platform, as well as manage the rest of the modules - government module and market module - of the economic nodes to which they belong. The wallet will also enable users functionalities such as the participation in the voting process, the delegation of votes, the importation and exportation of accounts and access to all market tools - publications, reputation of the rest of the members, transactions registrations, among others.

Virtual Market

The WABA.network framework will include a set of modules to design decentralized markets for the P2P trade of products and services.

In the virtual market, the members of each community will be able to publish the products they offer, pay for the products they purchase, search for potential suppliers and customers using configurable filters, rate other members and personalize their own profile. Furthermore, the shops will have commercial tools at their disposition that will allow them to manage their inventories, follow their transactions and determine their shipping options.

To ensure the safe custody of all funds and the resolution of disputes, the virtual market of WABA.network will offer the ability to handle guarantee deposit. All parties involved in an exchange may choose to accept an independent third party ahead of a transaction, to whose account the buyer's assets will be sent as collateral. The assets may be released solely with the agreement of two of the three parties. This functionality minimizes the threat of scammers trying to take advantage of buyers and sellers.

Control Panel

By means of the WNT communities, developers and social and economic

architects are encouraged to work cooperatively in the development of new

monetary and civic tech system, there-

by making of WABA.network a decen-

tralized organization

The control panel will allow each community to manage the parameters in a consistent manner with their government method, but also to monitor the specific KPIs of each economic system in real time - for example, the total tokens emission amount, the speed of tokens circulation, the transaction volumes, the credit volumes, etc. The panel will also include functionalities linked to the governance of the system, such as the creation of proposals and their follow-up, the implementation of surveys and the analysis of their results.

WABA.network Token

The WABA.network Token (WNT) is the device that allows communities, developers and complementary currency architects to access the WABA.network platform and align their incentives in such a way that they work cooperatively in the development of new monetary and civic tech systems, thereby making of the platform a decentralized organization. Communities will use the WNT to gain access to all the features provided by WABA.network. Developers and complementary currency architects that work in conjunction with communities, helping them in the development of new systems and features, will be rewarded with WNT.



Since some of the communities that have already expressed their interest in joining the WABA.network (including 2 of the 3 use cases that have already developed) fall short of the funds required to develop their own token, there will be an initial distribution of 11% of the WNT to communities that we consider beneficial for the platform. It is through this airdrop that the platform will kick-start. Also, since 15% of the initial distribution of WNT will be airdropped to EOS token holders they will be able to negotiate

directly with communities that desire to obtain the amount of WNT that they need to launch their own token on the WABA.network.

The WNT acquired by each community will allow it to use all the resources offered by WABA.network. The amount of WNT that communities would have to put into the platform will depend on the number of users (accounts) that it will register: In principle, each community would have to pay 20 WNT for each account it opens (which considering the initial price of the WNT would equal to 1 USD). When a new community is set up in the WABA.network the WNT used to gain access will be automatically burnt.

WABA.network will provide communities with standard (parameterized) templates of monetary and government systems that will enable them to build their own economy. Should they need to modify these templates to make them better fit their needs, or in case they require a whole new system, they could call upon developers and community currency architects for their help. If these latter offer their work to the communities and if as a result of this joint collaboration a final product is delivered, all the parties involved in the process will be rewarded with newly issued WNT. Thus, the WNT will be endogenously issued every time there is a growth in WABA.network capabilities arising from the participation of its members.

The reward given to the participants of these joint collaborations will depend on the size and usefulness of their contributions. The size dimension can consist of two categories: features and systems. A feature is any component or element that is added to an existing monetary or civic tech system. A system is, as it name already indicates, a monetary or civic tech model that communities can choose to run their hubs. The usefulness of these innovations will be determined by the number of accounts that make use of the features that those code lines create. When developers (either on their own or in collaboration with complementary currency architects and communities) append a new feature or system to the existing resources of the WABA.network platform they will be allocated a certain amount of WNT, which will depend directly on the size of the innovation. They could then choose whether to claim those WNT or to keep them in the platform to earn an additional reward arising from the usefulness that the innovation might eventually have. The withdrawal of the WNT, whenever it is decided, will involve the totality of the WNT, implying that no more rewards would accrue from the corresponding innovation.

This mechanism where those who contribute to the development of the WABA.network get a reward that is proportional to the usefulness of their innovations, only provided that they keep their WNT in the platform, also favours the growth of the WABA.network in a community sense. Since WABA.network is intended to work as an open source organization the members that show a high level of commitment with the project will be able to participate in all the matters that concern its evolution. These matters cover a wide variety of issues, such as determining the amount of WNT that communities must acquire to access the platform, the granting of special bonuses to specific communities that can not afford the WNT purchase but might be beneficial to WABA.network, the purchase of more EOS to increase the scalability of WABA.network, etc. In order to be considered "highly committed" with the project communities will need to have stayed in the platform for 180 days, and complementary currency architects and developers will need to have vested WNT (either acquired or earned) for 180 days as well.

WNT token holders that support communities will be rewarded with WNT. When the communities use the WNT transferred by their sponsors these are burnt. The sponsor, however, can get the WNT back (and even more) depending on the reward it will earn. The size of this reward will depend on the number of active accounts (users) that the community has after a predefined period of time. The rationale of this mechanism is to tie the rewards of those who support communities to the performance of their beneficiaries. Since WABA.network will run on EOS, transactions both within and between economic hubs will bear no costs. However, the possible volume of transactions for each node will depend on the bandwidth acquired by WABA.network with the resources obtained in the TGE. The total bandwidth of WABA.network will be evenly distributed among the economic hubs operating on the platform.

Those economic hubs wishing to make exchanges between them must stake a larger amount of WNT. Instead of being burnt, these additional amount of WNT will back up inter-community transactions. To facilitate exchange between hubs, the platform will allow every member of every community to make inter-community exchanges using the tokens of their own hub (a buyer from community A will pay using the tokens of community A and the buyer from community B will receive the equivalent value in tokens from community B).

All tokens running on the WABA.network platform will have an exchange rate with the WNT, which will be given by the ratio between the hub's circulating tokens and the amount of WNT acquired by the hub. The exchange rate between the tokens of the different hubs will be computed by means of one of the protocols used for the exchange of non-liquid tokens. Every time there is a transaction between hubs, members involved in it will have a debit (in the case of the buyer) or a credit (in the case of the seller) in their respective wallets; besides, their hubs will have a debit or a credit of WNT for a value equivalent to the price paid by the buyer times the exchange rate of the hub's token with the WNT. This mechanism ensures that each hub as a whole can buy goods and services in excess (relative to its sales) from others in an amount that cannot exceed the stock of WNT safeguarded to participate in inter-community exchanges.

In order to prevent the WABA.network's growth from being hindered by bottlenecks there will be an endogenous WNT issuance mechanism which will be activated when the following two conditions are met::

1) That the time series representing the trend (estimated through the Hodrick-Prescott filter) of the utilisation of the total bandwidth of the network is higher than 90%. This condition will, in turn, be activated if eventually the EOS blockchain falls short of capacity to process all the transactions of the applications running on top of it, in which case the bandwidth that each application would get would be proportional to the amount of EOS tokens it holds.

2) That the price of WNT in relation to EOS is above a threshold given by the average of the last 6 months.

All of the issued WNT at that moment would be used to acquire more EOS, so as to expand the bandwidth and reduce its utilization rate below the critical level. This would allow the communities that operate within WABA.network to continue growing without restrictions.

The first condition guarantees that the WNT emission is made only when there is a need that, if not satisfied, would limit the growth of the network. The second condition guarantees that the emission of WNT is made only at a moment where the platform is successful. This mechanism also tends to reduce the volatility in the price of the WNT.

WABA.network Token Generation

The WABA.network Genesis Contract will mint 1.000.000.000 WNT, which will be allocated as follows:



We are committed to the long-term success of the platform. This is why we have set a vesting period for WNT tokens minted for allocation to founders. Founder tokens are allocated over a 24-month vesting period, with a 6-month cliff.

The price of every unit of WNT is set at 0,05 USD. The TGE will comprise a 3,000,000 USD soft-cap, which is the estimated cost of the development of the platform (60% for software development, 40% for the marketing, legal affairs, etc.).

Early Contributors

Early contributors are those acquiring tokens during the pre-sale period . For these contributors a special discount ranging from 50% to 30% (depending on the time when they make their investment) is being offered.

The total amount offered to early contributors will be 4% of all tokens, which mounts to 40,000,000 WNT tokens equivalent to USD 726,000, which is the budget for the development of the projects that are being built before the TGE (see Zones and Communities section). In the case that not all tokens offered to early contributors are sold, WABA.network reserves the right to sell these tokens to other investors in a second contribution round.

A contract will be signed with each investor. This contract will serve as a warranty that the tokens will be distributed to the investors at the agreed price.

There will also be an NDA clause in the contract. Contributors will not be able to publish any information regarding the WABA.network project or the size and agreed price of their contribution.

The Contribution Period

The contribution period will offer 400,000,000 WNT and will last for 15 days. Anyone who wishes to use the services of the platform, some of which will already be available when the contribution period takes place, will be able to acquire WNT. These tokens will be locked in the WABA.network genesis contract until the contribution period is over. Immediately after the end of the contribution period contributors will get their WNT. From then on they will be able to use them to start using the platform.

Those who participate in the token generation event will be able to acquire WNT at a preferential rate according to the day of their participation. The discount calendar will be the following:

Day 1 to 2	Day 3 to 4	Day 5 to 6	Day 7 to 8	Day 9 to 10	Day 11 to 15
25%	20%	15%	10%	5%	-

Detailed instructions on how to participate will be announced on our website several weeks before the start of the contribution period. In the case that there were unsold tokens by the end of the contribution period they will be entirely allocated to WABA Foundation. Unlike the 100.000.000 WNT that it will be given in the baseline scenario presented above, these extra tokens will not be available for future sales. Instead, WABA Foundation will only be able to use them to lend them to those communities that wish to launch their own currency through the WABA.network back lack the funds to acquire the required WNTs.



The funds raised in the TGE will be used as follows:

The Airdrop to EOS tokenholders

The remaining 150,000,000 WNT will be proportionally distributed among EOS tokenholders holding 100 EOS tokens or more at the end of the contribution period. We expect that the recipients of these tokens will have the incentive to either build their own communities or invite other communities to join the WABA.network.

WABA.network Team

We are programmers, engineers, economists, developers and creative individuals with proven successful experiences in deep tech, taking part in the core development phases of projects such as Bitshares and EOS, as well as in the field and in the academia.

The WABA.network team is composed of high-skilled professionals with proven capacities to successfully deliver the platform presented in this white paper.

Marina Solanas - CEO marina@waba.network

Marina is a triple impact entrepreneur with academic training in Industrial Engineering. She also studied a Master's Degree in Renewable Energy Systems and an Engineering Leadership Certificate at Northeastern University and the Massachusetts Institute of Technology (MIT) through a Fulbright Scholarship.

Since 2008, she has developed her career as a leader in projects aligned with sustainable development with teams of engineers and scientists in industry, academy and the third sector in Argentina, the United States and Spain.

Marina co-designs the strategy and coordinates the WABA.network team in order to make the most of the potential of blockchain technology to achieve sustainable development objectives.

Sebastian Valdecantos - CEO

sebastian@waba.network

Sebastian holds a PhD in Economics from Université Paris Sorbonne-Cité, where he graduated with a thesis modeling international monetary systems. He is in charge of the design, execution and follow-up of WABA.network core projects.

In addition to his role in WABA.network, he works as the Chief Economist of the MonedaPAR project and as a professor of Macroeconomics in the national universities of San Martin (UNSAM) and Mar del Plata (UNMDP) in Argentina.

Previously, he worked as an Economic Affairs Officer at the Economic Commission for Latin America and the Caribbean of the United Nations (ECLAC). He specializes in the construction of dynamic systems adapted to the study and treatment of different economic problems.

His knowledge is essential for the design of the structures of WABA.network's economic hubs.

Pablo Tutino - сто pablo@waba.network

Pablo is an Information Systems Engineer, FinTech entrepreneur, entrepreneur in Blockchain for triple impact and Full-stack developer.

In addition to his role in WABA.network, he is a member of the Board of Directors of the Bitcoin Argentina NGO and works in the Definition of Strategy and Institutional Relations of the MonedaPAR project.

He has 10 years of experience as entrepreneur, 15 years of experience as a full-stack developer and 4 founded companies, including Latincoin, Bitcoin Exchange and LimeWallet, the wallet for Bitshares 1.0.

Jesus Chitty - Blockchain Consultant jesus@waba.network

Jesús has a Master of Business Administration from the Autonomous University of Barcelona. In addition to his role in WABA.network, he is the founder of the Blockchain Argentina, a consultancy that gives courses and trainings on Blockchain related topics.

Jesus also serves a witness of the Steem Blockchain, where he has been voted by all the stakeholders to validate the blocks of the network.

Together with Pablo and Matias, Jesus created the first Argentinian "Smart Coin" in the Bitshares Blockchain: BitARS. This collaboration laid the foundations that later lead to the creation of the WABA.network.

As a crypto enthusiast, Jesus maintains a close relationship with the community and contributes to the ecosystem of different currencies through the maintenance of hubs and mining equipment.

Fernando Buero Trebino - cco

fer@waba.network

Fernando has more than 10 years of experience in digital communication. He started programming during high school and never stopped. He began in digital marketing agencies as a developer, working in renowned multinational companies such as MRM Mccann, Dentsu or Insite for leading brands such as Hewlett Packard, Intel, HSBC, Toyota, Bic, Honda, etc. His concerns led him to start working with teams such as Digital Producer and then spend the last 5 years as Director of the digital area in 360 marketing agencies, such as Dentsu or WTF.

In 2015, he began to carry out digital literacy courses for excluded sectors. This undertaking led him to get to know the Blockchain technology and to collaborate with the development of the SystemaD project, which is currently in the stage of pre-development with funds granted by the MIF, an IDB agency.

In December 2016, he met the MonedaPar project and since then his efforts have been focused on developing blockchain solutions to improve the life quality of citizens.

Francisco Valentini - Junior Economist fran@waba.network

Francisco is an Economics graduate from the University of Buenos Aires (UBA). He works as a teaching assistant in Statistics in the same university and is currently studying a Master's Degree in Data Mining and Knowledge Discovery. Previously, he worked as a Technical Assistant both at the Ministry of Finance of Argentina and at the Economic Commission for Latin America and the Caribbean of the United Nations (ECLAC).

Developers

Ariel Scarpinelli - Senior Java Developer Senior software achitect & Java Developer

He is a passionated developer with more than 15 years of professional experience. Father of two. Got a degree in software engineering. He is deeply technical oriented and love to produce and ensure that my teams produce excellent quality code; but also he love's to build products that are used by people; and focus on all the different aspects of them such their UX; not only code. He is a natural leader and have been leading working teams of sizes up to 23 people for few years now. He like's to empower the people he work with, and make them feel ownership and pride of the work they do.

Marcos Gutierrez - Senior Java Developer Senior frontend developer - Expert @ Reactjs, Graphql, Redux

Juan Sormani - Web Mobile Developer Senior software & Hardware developer - SYSOP UNIX

Advisors

Matias Romeo - Technology and Blockchain Advisor matias@waba.network

In addition to his role in WABA.network, Matías Romeo is a Core Developer of the EOS platform. He is also a Witness of the BitShares platform. He previously co-founded Latincoin Bitcoin Exchange and served as developer of Voest-Alpine (Siemens) Safety-Critical Real-Time Systems.

Daniel Rybnik - Legal & Tax Advisor daniel@waba.network

Founder & Managing Partner at EnterPricing, the leading Latin American Transfer Pricing firm. Leading consultant in a wide range of transfer pricing documentation projects with local, regional or global scope in a variety of industries, including bio-science, energy, chemicals & utilities, agricultural, transportation, hi-tech and consumer goods. Advice to multinationals in planning the intra-group terms and conditions for the transfer of tangible and intangible property, the rendering of services, and the design and implementation of tax-effective supply chain models.

Active participant in transfer pricing controversy cases since the introduction of transfer pricing legislation in Argentina in 1998. Client assistance in identifying and implementing controversy strategies, negotiating with tax authorities, and defense preparation and review.

Native Spanish, Fluent English and Working Knowledge of Portuguese.

Specialties: Transfer Pricing Planning, Implementation, Documentation & Controversy, Tax Effective Supply Chain Management, Customs Valuation convergence with Transfer Pricing, Valuations for Special Purposes, Alternative Dispute Resolution, Mediation.

August Corrons - Community currencies expert august@waba.network

Doctorate from the Jaume I University (UJI) in 2018. Interuniversity Master's Degree in Development Cooperation from the Jaume I University (UJI), the University of Valencia (UV) and the Interuniversity Institute for Local Development (IIDL). Master in Management and Business Management from the Institute of Business Executives (IDE). Engineer of Roads, Channels and Ports, and Technical Engineer of Public Works from the Polytechnic University of Catalonia (UPC).

Since 2010 August has been teaching Economics and Business Studies at the Open University of Catalonia (UOC), in the field of corporate social responsibility, business management and occupational risk prevention. While he's been teaching at the UOC, he's been maintaining his business activity, managing companies in the civil engineering and construction sectors.

He's a member of the Oikonomic writing team (Journal of Economics, Business and Society of the UOC) as well as the IJCCR (International Journal of Community Currency Research).

His research interests are centred on social and complementary currencies, collaborative and solidarity economy, local and sustainable development, as well as social psychology.

Scope of research: digital and complementary currencies, social and solidarity economy.

