LEIOS

TECHNICAL PAPER

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Overview

Leios International, Inc. (Leios INC) is a software company that is creating a blockchain-based cross-border fund transfer solution intended for enterprise use; namely by banking, remittance, and payroll companies. This multifaceted system will feature a user-friendly interface atop a blockchain system that complies with all U.S. and internationally mandated regulatory requirements, and aids in their enforcement. Ultimately, Leios looks to replace current payment systems which rely on bank wires, and at times require multiple middlemen and many points of failure. In order to achieve this, Leios will integrate stablecoins within the payment system to allow for blockchain to be used without volatility concerns. Leios will also make it impossible to trace transactions of an institution or its individual customers on a public ledger, while still generating records for their internal use and legal compliance. This will ultimately allow for fund transfers between regulated financial institutions to be executed with reduced costs and transfer times.

Technical Goals

The goal of Leios International, Inc. is to achieve a system that addresses all of the common disincentives to use blockchain transfer implementations at the enterprise level. There are the five critical improvements Leios INC brings. Leios INC will:

1. Provide a simple interface to interact with a blockchain-based system, be it by employees of banks and remittance companies, or by their customers through self-service implementations such as mobile app transfers.
2. Develop a high-throughput blockchain protocol that will scramble transactions to render them publicly untraceable.
3. Protect transfers from exchange rate volatility by implementing stablecoins, and expanding coverage of compatible exit points by implementing atomic swaps between different stablecoins.
4. Create ways to facilitate seamless exchange from fiat to blockchain and back again to fiat through a network of Leios partners positioned around the globe.
5. At a later stage, grow the reach of our simple and privacy-enhanced fund transfer experience by including all cryptocurrencies that support atomic swaps.

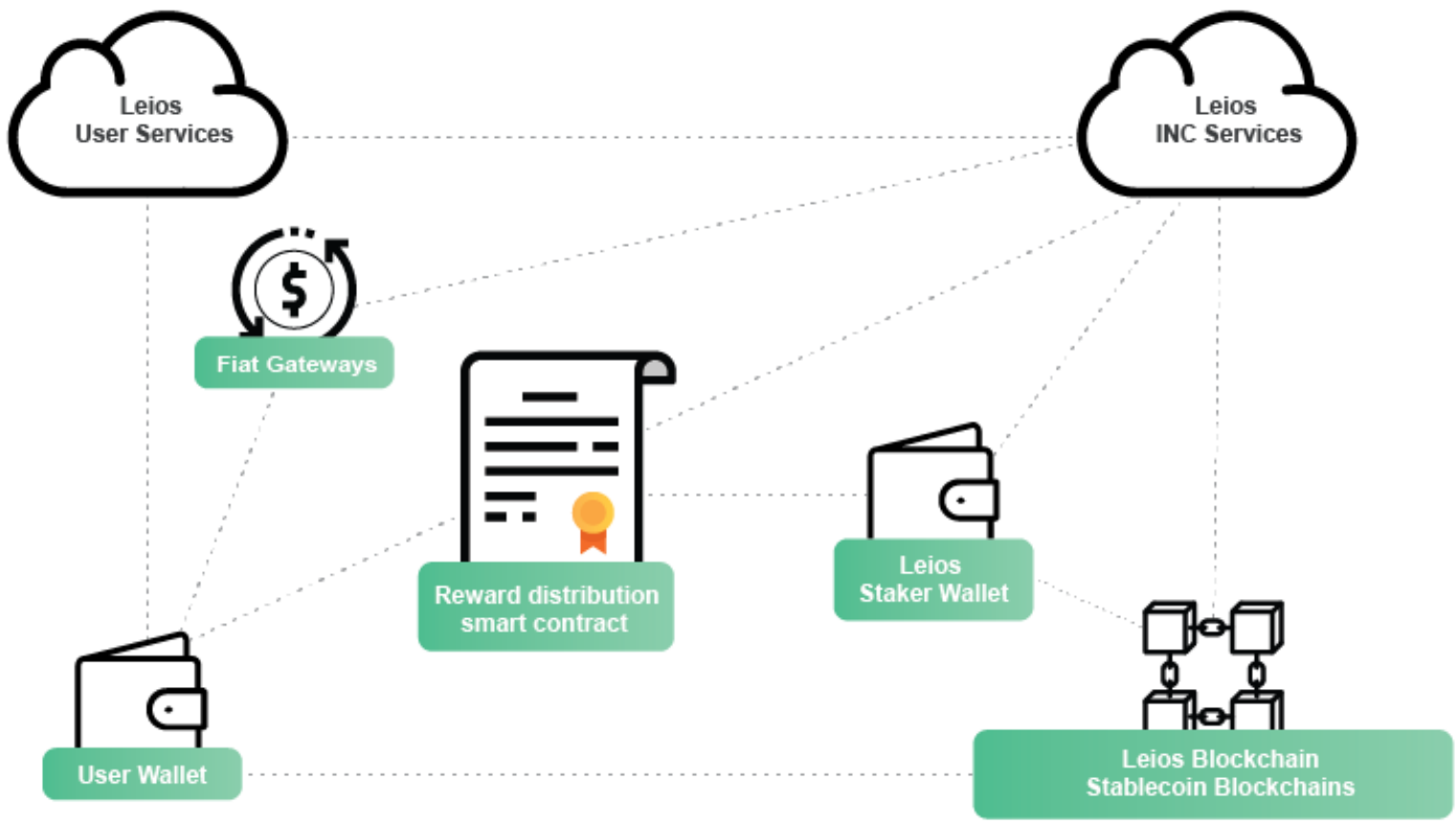
Specifications

1. Overall Scheme

The main features of the system are:

1. An enterprise solution that allows an institution to request the sending of fiat funds in the form of equivalent blockchain assets to an exchange that can reconvert the blockchain assets into local fiat for the end receiver.
2. Private transfers that prevent anyone from tracing individual transactions, while still allowing full audits of all transactions internally.
3. Fund representation through stablecoins like USDC, DAI, BitUSD, and others to avoid price volatility.
4. Reward-based staking of LEIOS tokens to enable the obfuscation of transaction details from the public ledger via scrambling.
5. Transparent fee collection and reward distribution among stakers of LEIOS tokens which are powered by public smart contracts.
6. Mechanisms to ensure the faltering of service or downtime cannot harm enterprises or stakers.
7. At a later stage and with appropriate licensing, localized wallets that link to the Leios system for individual users without the need to trust a third party.

There are several components that work in conjunction within the Leios system to support fiat deposit, withdrawal, internal funds transfer, staking, and reward distribution. Below is a visualization of component interaction:



Leios Blockchain

Leios will have its own blockchain to support private and almost costless transactions of the LEIOS token. Participants in the Leios system can use atomic swaps for private funds transfers.

Fiat Gateways

Transfer gateways to support fiat-to-stablecoin transactions and to allow fiat deposits and withdrawals for Leios users.

Leios INC Services

A cloud-based service to support staking, reward distribution, and market making for the LEIOS token and any stablecoins used within the system.

Reward Distribution Smart Contracts

Transparent smart contracts to store the collected fee-based rewards for stakers and to distribute them periodically.

Leios User Services

A cloud-based service to support a user search function in mobile and web applications. The service does not store or receive any sensitive data, including public wallet addresses of users.

User Wallet

Consumer level mobile or web application to securely access different wallets and participate in transaction signing for atomic swaps and transfers.

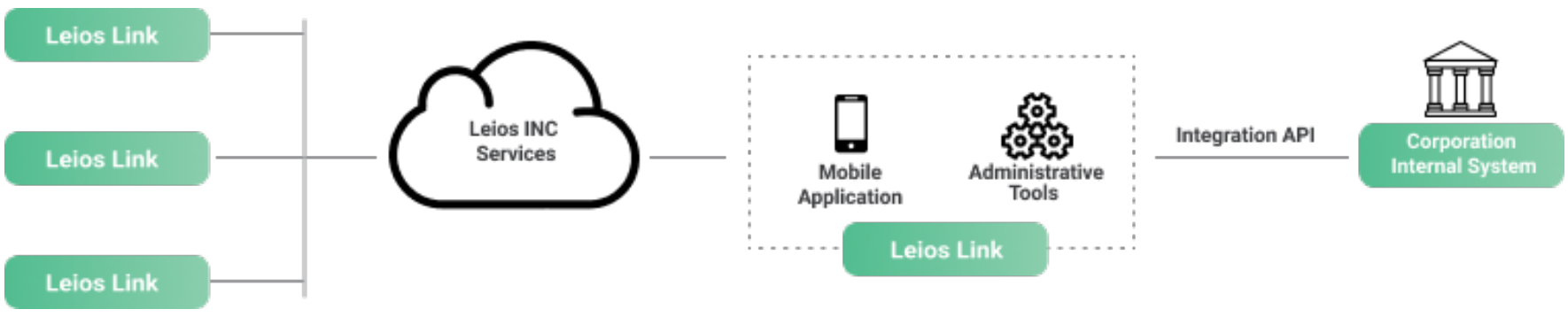
Leios Staker Wallet

Mobile or web application to control the staking, which may be incorporated into the user wallet.

2. Leios Link: Remittance Solution

Leios Link is the name of the enterprise solution designed for bank and remittance companies to interact with a stablecoin-based cross-border fund transfer system. There are multiple ways to use the service which accommodate the different security preferences and customer data management policies of different institutions. Leios Link integration package comes with two versions: one with a separate web interface to manage the integration and with a mobile application for customers to use the transfer services, and the other is the embedded integration version, where appropriate functionality will be directly integrated into the existing corporate applications keeping a single point of management. Both versions will require the Leios INC development team to work with the client's IT department to set up the integration.

The first version consists of three parts: a client-hosted backend which will be integrated with the client's existing applications; a web-based administrative tool to manage the integration; and a mobile application as a tool for end-users to use money transfer services.



In the second version, there is no specific mobile application nor front-end management interface. Rather, the client interfaces with the money transfer and management tools through their own applications, with additional functionality integrated by Leios INC.

Each version will have the ability to interact with Leios Backend Services to support cross-bank transfers. Through any implementation, the clients of Leios INC will be able to do the following:

2.1 Adding KYC-AML data of our Client's Customers

Using the Leios software, our clients can create customer IDs for each of their customers, either by integrating their existing customer database or by manually adding in customers as they prefer. Each customer will be tied to KYC-AML data to ensure compliant transactions. Furthermore, Leios INC can arrange to have the KYC-AML data stored by a third-party KYC-AML company for an additional cost; although it is expected that most institutions will handle their own KYC-AML processes.

2.2 Linking Customer Accounts to Leios Link

Leios Link takes into account two types of customers for the client: those with an existing account balance through the client, and those without an account. For those with existing balances, they will likely prefer to conduct the transfers using their previously loaded funds. This is possible through two implementations:

1) Leios can integrate Leios Link directly with the account or banking services, allowing it to deduct the amount transmitted on behalf of the customer from the customer's account. This integration option would link to the same customer ID used during the KYC-AML step.

2) The client can manually deduct the balance from their customers funds and then initiate a transfer matching that same amount. This option is available for banks that do not prefer to integrate our software.

As for those who do not have accounts, they will likely be one-time customers who will use the remittance service via a walk-in to the offices of the client, or through an electronic service offered by the client. In this case, the client can either create a temporary account for the sender, or create a reusable customer ID which keeps KYC-AML data on record for that particular sender to remit funds in the future.

2.3 Sending Stablecoins

After the first stages of inputting the customer ID, receiving ID, destination, and setting the amount to be transferred, the next step is the transfer of funds from the client's corporate wallets to the client's corporate account on a fiat gateway exchange in the appropriate country where the receiver of the transfer is located.

The stablecoins will be held by the institution in corporate crypto wallets that interact with

Leios Link, which will be responsible for signing and sending the transactions to be processed through the Leios Backend Services and blockchains. At this stage, the staking model will take effect, swapping the stablecoins into and out of the Leios Blockchain to allow scrambling of the transaction from the public ledger, and to allow interoperability between the different stablecoins listed on each fiat gateway within the Leios network. The entire process takes anywhere from a few seconds to a few minutes, depending on the stablecoins used and the volume of transactions at the time.

2.4 Withdrawing from the Fiat Gateway

At this stage, the original sender's funds exist in the client's corporate account at whichever fiat gateway exit-point is required for remittance completion. Through pre-set agreements between Leios INC and these exchange partners, the institutions will be able to interact with their corporate exchange accounts through Leios Link using APIs. They will need to provide the account details for the withdrawal, then initiate the withdrawal. After confirming, the withdrawal will commence and complete within minutes or hours, depending on the exchange partner.

Alternatively, if a client wishes, they can have full control of their corporate accounts and manage them manually with the aid of administrative tools provided by Leios Link.

2.5 Receipt Issuance

Leios Link will provide the receipt for all elements of the transfer process that are required by regulators to be disclosed. This includes the amount sent, the fees applied, taxes, the exchange rate, the address of both parties, and the date of funds availability. Leios Link will record the data for each step and generate a receipt with these details at the end of the transaction.

3. Enterprise Mobile Apps

The enterprise mobile app will be offered in two forms: firstly, as an integration into the existing apps of clients; and secondly, as a white-label app for clients who either do not have apps for their services, or wish for the services associated with Leios to be on a separate app.

For integration with existing apps, Leios INC will allow for the client's customers to send a request with all necessary information to the client in order to initiate a transfer on behalf of the customer. If the client desires, the process can be automated, as long as the client has

opted to integrate the customer ID with their funds or bank account.

For the white-label app, this will be a template application that the client can customize with their own branding and layout. This application will be created to interact with Leios Link on behalf of the client. The app can also initiate transfers or push a request to a company representative to do so, depending on their preferred method of account integration. There are no differences between the capabilities of the integration and the white-label app. They exist as two options for clients to allow their customers to send their fund transfer requests electronically.

Once the requests are sent, the process to conduct the transfers will be done by the Leios Link software in the steps mentioned in the above section. Automated options can only become available after KYC-AML procedures are completed. These may already be completed by the customer, or the client may offer the completion process natively, or else Leios INC can create a KYC-AML procedure for the client within the app based on individual agreements and terms.

4. Leios Link Deposits/Withdrawals

Utilizing Leios Link, our enterprise clients can handle the entirety of the bank to bank deposit and withdrawal process, starting from the client's sending customer account, and concluding in the receiver's bank account.

4.1 Deposit Method:

The funds sent through the Leios System are done so in stablecoin form. This means that clients of Leios INC have to hold stablecoins, then associate these stablecoins with their customer transactions during the transfer process.

Leios INC will have its own pool of stablecoins to provide to its clients. The clients can receive the stablecoins from Leios INC in one of two ways:

1) Clients can purchase stablecoins from Leios INC as part of its agreement with them. Clients can purchase their expected volume, with an option to buy more as needed, or sell any excess back to Leios INC at fixed prices. Alternatively, Leios INC can lend stablecoins in small quantities without charge, and receive reimbursement for their fixed USD value as they are spent in the remittance transactions. Leios INC will repurchase the stablecoins from the fiat gateways and return them to its pool.

2) After initially receiving stablecoins, a second possibility emerges through agreements with the fiat gateway exchange partners. Instead of Leios INC repurchasing the stablecoins, the client may themselves purchase the coins to be returned to their corporate wallet. This option

will be available pending pre-arranged agreements which Leios INC will make with the exchange partner on behalf of its clients.

After the client is in possession of the stablecoins, the last deposit step is for the client to associate these stablecoins with customer IDs when performing transactions. This is possible through Leios Link, as described in the Leios Link section, under 'Sending Stablecoins'. The customers can deposit fiat to the client through whatever channels the client already provides for fiat deposits.

4.2 Withdrawal Method:

As explained in the withdrawal stage of the Leios Link section, the stablecoins ultimately arrive in the corporate account of the client at the fiat gateway exit-point chosen. Leios INC will ensure that the client account is set up with all required functionality for the Leios System, and will integrate through the Leios Link software. However, Leios INC will not have access to these accounts.

The integration of various exchange interfaces with the Leios Link software will occur through APIs with the exchanges, and whitelisted accounts. The following actions will be required through these integrations:

1) Exchange Stablecoins for the Local Fiat Currency: This can be done in various ways, depending on the exchange partner and the options they offer. Some options are: Leios purchases the stablecoins and pays the exchange to withdraw its equivalent in fiat; the client can place a limit sell order of the stablecoin for the local fiat at the exchange rate if the volume allows; or the client can sell the stablecoins to the exchange itself for local fiat at the given exchange rate. Small fees can apply during this stage, which will be paid by the exchange from their stablecoin balance. These fees are normally about a fifth of a percent (~0.2%).

2) Withdrawing to Receiver Bank Accounts: Through Leios Link, the client can add a receiving bank account for the transaction. After the bank account has been added and the local fiat is available on the exchange, Leios Link will provide a "withdraw" command that will push the request to withdraw local fiat through a wire transfer from the exchange to the receiving bank account. This will carry a small fee that will be deducted from the local fiat balance, which, depending on the exchange, is estimated to be about half a percent (~0.5%).

If a client does not wish to do withdrawals through Leios Link, then they will have the option to process withdrawals manually by directly interacting with the exchange through the exchange's provided website.

5. Enterprise Wallets Transfer Process

In order to elucidate the stages of the transfer process, each stage will be explained through an example using a hypothetical transaction, tracked from its initiation to completion.

For this section, let us suppose Alice wants to transfer $100 to Bob, and Alice's choice of remittance company, the fictional Ace Remit, utilizes the Leios System. Charlie is the employee that processes remittance transactions at Ace Remit. In this scenario, the money transfer process consists of three stages: the sender depositing funds with Leios' bank or remittance client; the client utilizing Leios Link to send the funds to their corporate account on a fiat gateway exchange; and the client withdrawing the funds from the exchange to the end receiver's account. It should be noted that from the perspective of Alice, the steps are simply: deposit with Ace Remit, and request a remittance transfer.

5.1 Depositing Funds

Alice needs to send the request that she wants to send $100 to Bob. She can do this by walking into an office of Ace Remit and speaking to an agent utilizing Leios Link, where she will deposit the $100 along with Ace Remit's fees. Alternatively, she can send her request through the Ace Remit app, which is linked to her credit card or bank account. In this example, Alice's account will be debited $100 plus Ace Remit's fees, in order to send the transaction request to an Ace Remit representative for processing. Along with the money, Alice needs to provide her KYC-AML documentation.

5.2 Leios Link Transfer

Whether the request was received in person or electronically, Charlie, the Ace Remit representative will then follow the stages of completing the Leios Link steps described in the Leios Link section. If the request was electronic, then all fields required would have already been submitted by Alice. At this stage, Charlie can click on an item called "produce receipt" which will use the data provided by Alice—along with the preset fees for atomic swaps, exchange, and wire transfer set by the fiat gateway exchange—to generate a regulation E compliant receipt for Alice.

Charlie would then need to push the request for funds to be transferred through Leios Link. This will send the stablecoins used by the company, let us say USDC in this case, from the integrated corporate USDC wallets of Ace Remit to be atomically swapped into LEIOS token, for both privacy from the public ledger and interoperability between the most popular stablecoins and fiat gateways. (See Section 10 for details on the atomic swap process.) At the conclusion of the swap, the stablecoin may be the original type or an equivalent amount of a

different stablecoin, depending on which is required to interact with the exit-point fiat gateway exchange.

5.3 Withdrawing Funds

Once the stablecoins are in the corporate account of the fiat gateway exchange, Charlie can push a request through Leios Link's API integration to exchange the stablecoins for the local fiat currency, as described in the prior section. At this point, the exchange account has local fiat that can be withdrawn into local bank accounts. Using the same API interface, Charlie adds the details of the receiving bank account, which is then passed onto the exchange through the API. Once completed, Charlie pushes a withdraw request to send the funds from the corporate account to a local account via wire transfer.

This entire process, up until this point, is theoretically possible in just a few minutes. However, it is unavoidable to eventually switch back to a traditional bank transfer in order to complete the conversion of fiat currencies. This wire can vary in time, but Leios INC will only send through hold wire transfers and will not work with the much slower ACH transfers. This will allow for the aforementioned step to normally occur within the same day, ranging anywhere from minutes to hours, and may be slowed by the weekend, depending on the receiving country.

6. Individual Mobile Wallets

Upon procuring the appropriate licensing, Leios will eventually develop individual mobile wallets to allow users to take control of the fund transfer process without the need of a third party. In this particular user-based implementation, the mobile wallet plays a pivotal role in the transfer process due to its responsibility for securely holding funds and signing required blockchain transactions, replacing the centralized security required in the enterprise model.

Nowadays, with cryptocurrency still very much in its infancy, the general user interface of blockchains are hardly intuitive enough for the average user. In order for cryptocurrencies to represent a reasonable alternative to fiat currency wallets, simplifications must be made in the user interface with cryptocurrency assets, as well as the workflow required for making transactions.

With consideration for the general user experience, we believe that exposing cryptography aspects as ubiquitous as a public key can deter the novice user from committing to using a cryptocurrency transaction system. Verifying the identity of the receiver, a step that should be as streamlined as possible for daily usage, becomes a source of constant uncertainty and hassle for non-technical users. The evident nature of this problem can be seen in the existence of proposals such as EIP928 for address avatars on Ethereum. In order to bridge the

differences between conventional and blockchain transactions, Leios INC believes that a password, fingerprint, and pin-based interface for the authentication of the Mobile Wallet is the best solution to facilitate users of all levels of technical expertise.

Here is the list of features and components of the mobile application:

a. Intuitive UI for general users who are not familiar with the world of crypto. Android and iOS devices will be supported.
b. Unique username-based account in the Leios network, and the ability to search others by username.
c. Local secure sign-in using user preferred options including password, pin, Face ID, and fingerprint.
d. Intuitive KYC completion processes in order to deposit or withdraw fiat.
e. Multiple payment methods integration for fiat deposits and withdrawals.
f. Securely stored crypto wallets, including Leios, stablecoin, and others.
g. Hardware encryption for wallets if OS and device are supported, thereby allowing the Leios app to be a hardware wallet replacement.
h. Ability to stake Leios tokens by sending them to Leios temporarily and generate rewards based on the staking amount.
i. Transaction signing to support crypto transfers and to participate as a party in atomic swaps.
j. Protection against external screenshots, rooted installs, keylogging, and other types of attacks.
k. User-attached public and private keys (u-key) to sign, encrypt, and decrypt data when communicating with external Leios services.
l. Wallets and user data backup methods including QR codes, NFC, mnemonics, and external trusted services.
m. Advanced options to facilitate interaction with cryptocurrency-related services such as depositing/withdrawing crypto.

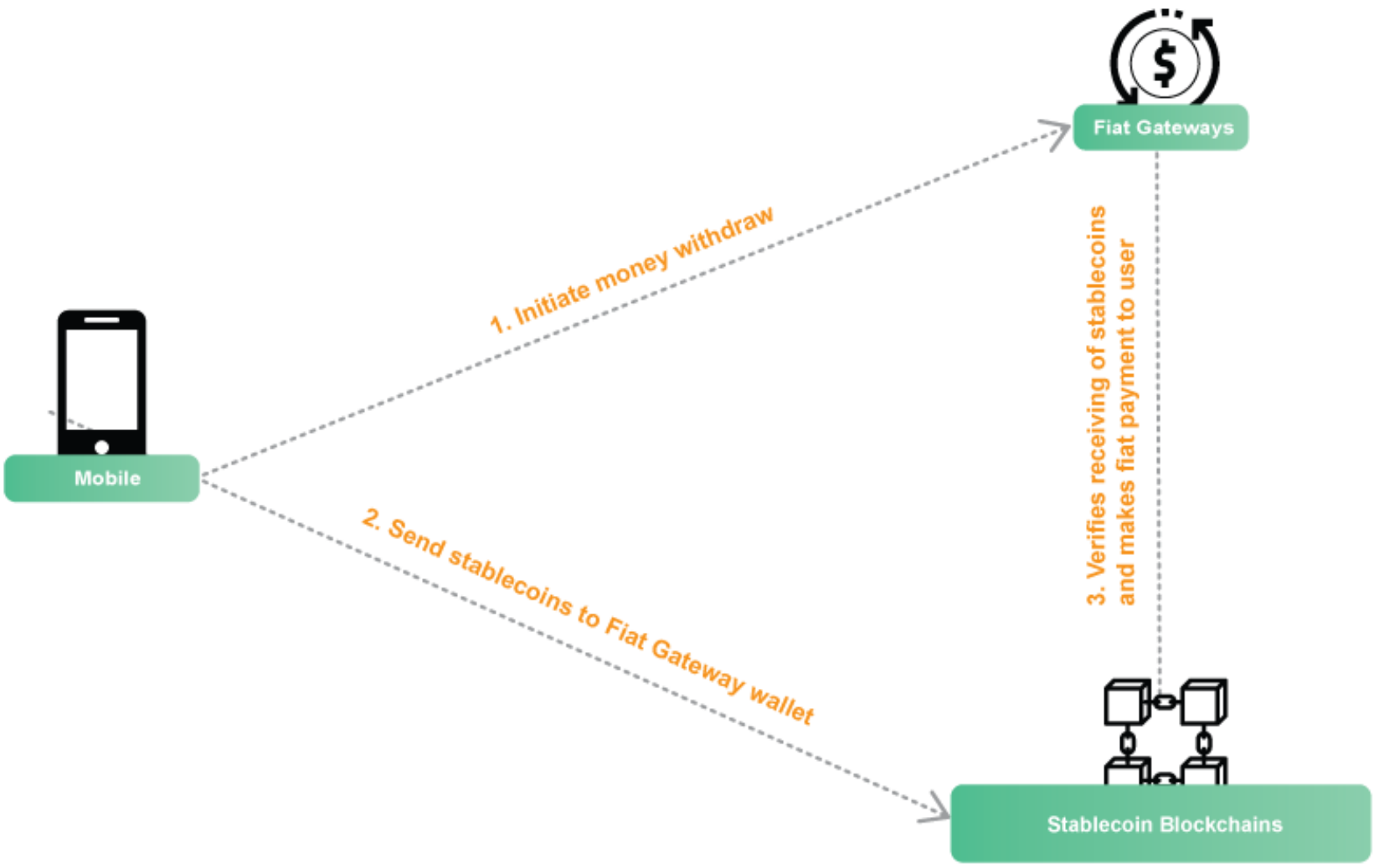
7. Individual Wallet Deposit/Withdrawal

Regarding the transfers done from individual mobile wallets, in order to initiate a transfer of funds, the user must first deposit their funds to their mobile wallet, which can be done according to the following diagram:

1. In the first step, the user will deposit their fiat via a Fiat Gateway available in their country. The mobile application will allow the user to use any payment method provided by a local Fiat Gateway and make the deposit. During payment, the user will also provide his stablecoin wallet public address.
2. After the user performs the payment, the Fiat Gateway will the send equivalent amount of stablecoin to the user's stablecoin wallet. A fractional percentage of the payment will be taken by the Fiat Gateway as a fee, differing by location.

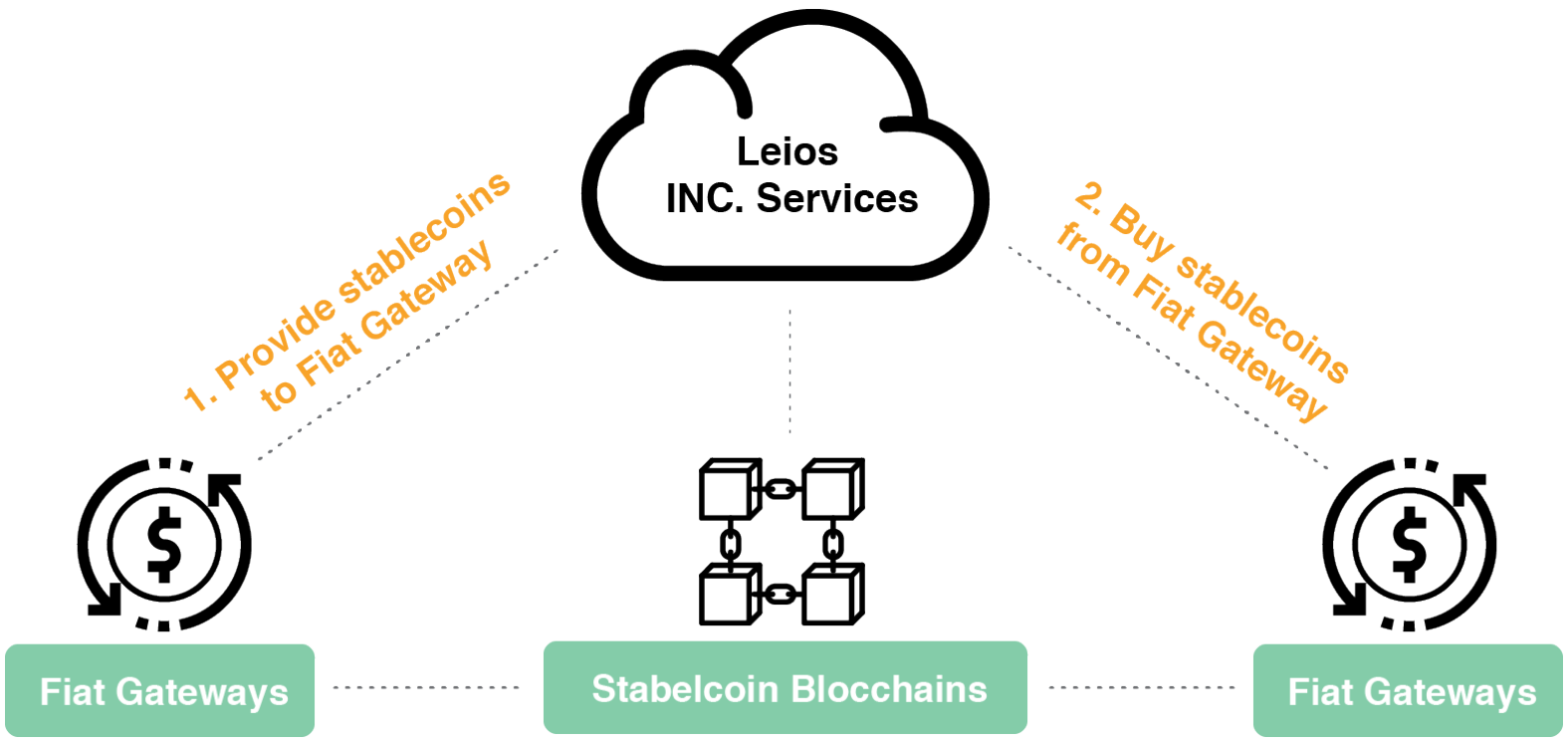
From the above diagram we can see that the funds are kept in stablecoins in a mobile wallet, which protects the user from any volatility in the cryptocurrency market.

At any time, the user can withdraw their stablecoins via the appropriate Fiat Gateway available in their country. The Leios System will initially only facilitate the withdrawal of stablecoins received via the process of money transfer described in Section 8.3. Withdrawals will be done according to the following schema:



1. During the first step, the user's mobile application will initiate money withdrawal via the appropriate Fiat Gateway's API call, which will return to the user's Fiat Gateway stablecoin wallet address.
2. The user then sends the stablecoins he wants to withdraw into fiat to the Fiat Gateway (using the wallet address received in the previous step).
3. Finally, the Fiat Gateway verifies receiving of stablecoins and performs fiat payment to the user. Some percent of stablecoins will be taken by the Fiat Gateway as a fee.

Leios INC takes part in circulation of stablecoins between users and Fiat Gateways according to the following diagram:



1. In order for the Fiat Gateway to have enough liquidity for the necessary stablecoins (which are needed when users want to deposit money to their mobile wallets), Leios INC will always provide enough stablecoins to the appropriate Fiat Gateway (through our internal arrangements with the Fiat Gateway) using our pre-planned stablecoin liquidity pool that will always be kept at a larger amount than the highest estimations of the demand.
2. Leios INC will always buy back its stablecoins from Fiat Gateways, which they have received from users during withdrawing of fiat funds in their local currencies, allowing Leios INC to restart the cycle with new users.

Through agreement with our exchange partners, Leios INC will fix the price of stablecoins with exchange partners at 1 USD per coin. This will ensure a predictable cycle with precise fee calculations from entry to exit, ensuring consistency throughout the price of the USD equivalent stablecoin to actually match USD at all stages possible. This will eliminate even the minor volatility found in the stablecoin market.

8. Mobile Wallets Transfer Process

As was explained with Leios Link, in order to assist in understanding the stages of transfer, each stage of the transfer process will be described through an example from a hypothetical transaction, from its initiation to completion.

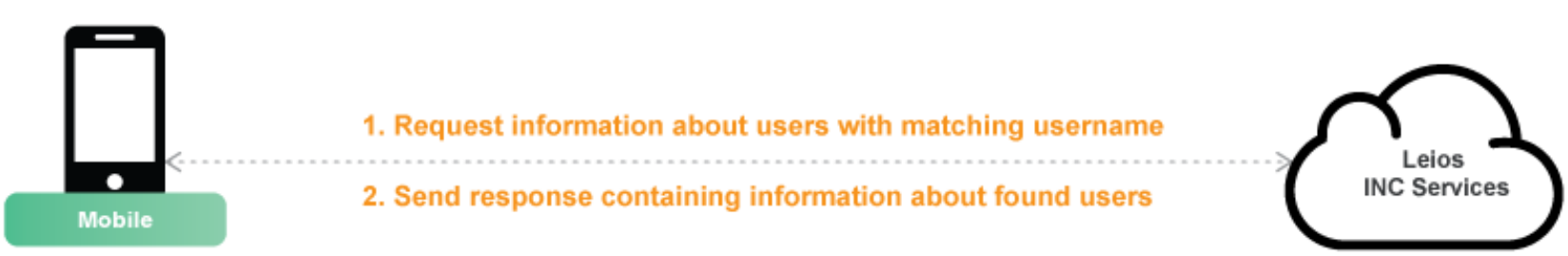
Let us again suppose Alice wants to transfer $100 worth of stablecoins from her wallet to Bob's. In this scenario, Leios INC has already acquired the licensing to handle money transmission transactions directly, and the users will not be using a third-party client of Leios to complete this transaction. The money transfer process consists of three phases described

in the subsections below: searching for a target user; confirming the transfer by target user; and the actual money transfer process. After initiating the money transfer process via the mobile application, Alice must enter the amount she wants to transfer (in our example, $100), whereafter she will be redirected to the user search screen.

8.1. User Search

In order to start the money transfer process, Alice must firstly find the target user whom she wants to send money to. She can do this via the user search screen of the mobile application by entering a name (or part of a name) for the target user. The mobile application will perform a user search according to the following diagram:

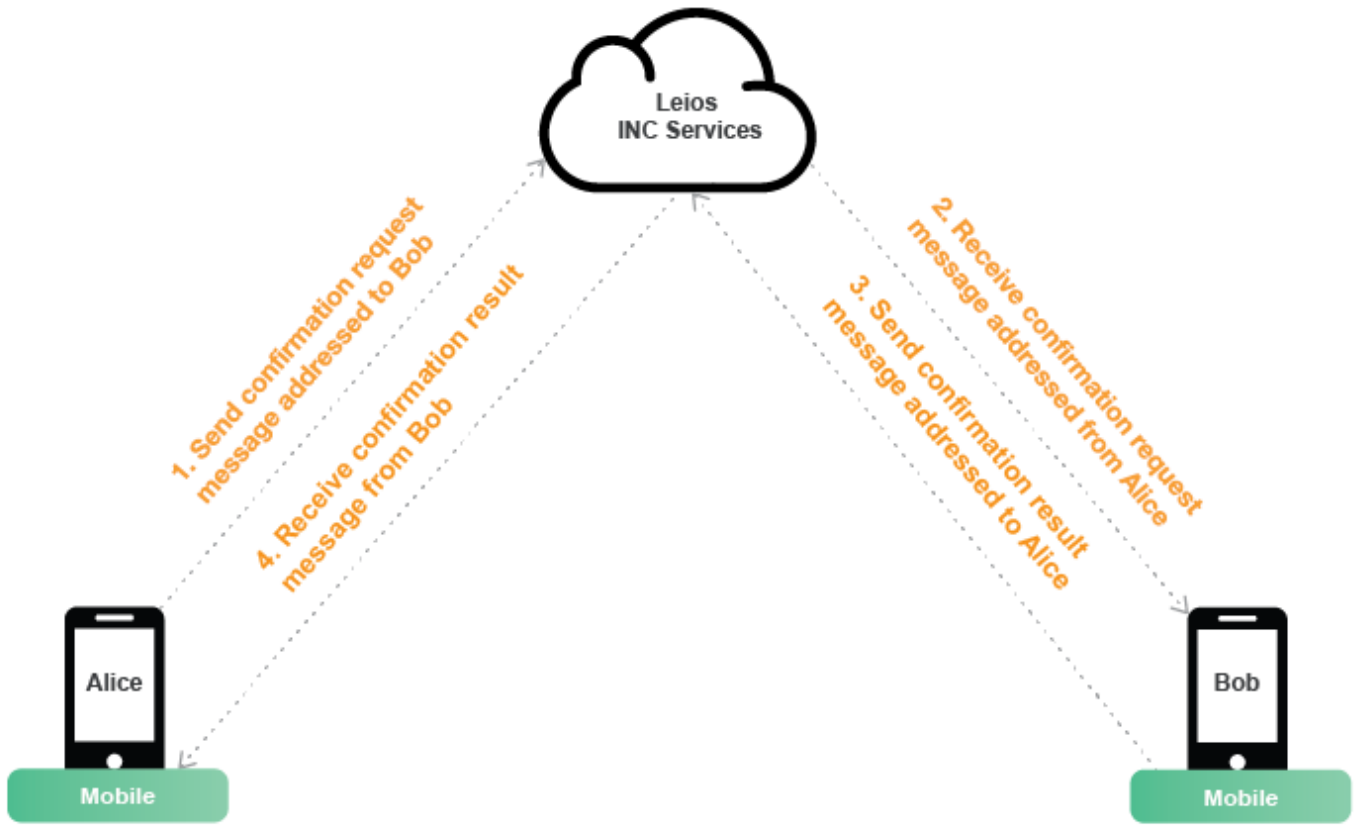
1. The mobile application will send a user search request to Leios Services containing search text entered by Alice.
2. Leios Services will find users with matching usernames and send back response-containing information (username and attached public u-key, which is generated for confirmation purposes) about each found user.



After receiving the search results, Alice must choose her intended target user (in our example Bob) and initiate the process of money transfer by sending a confirmation request.

8.2 Confirmation

Alice cannot start the money transfer process until receiving a confirmation from Bob. The confirmation process will be done according to the following diagram:



1. During first step, Alice's mobile application prepares a special confirmation request addressed to Bob, and sends that message to Leios Services. The body of the confirmation request contains the transfer ID, the amount of money going to be transferred, and the username and public u-key of initiator (i.e. Alice). The digital signature of Alice (which is constructed using Alice's private u-key) is appended to the body, then the final message is constructed by encrypting the result using Bob's public u-key. The final message can only be decrypted by Bob (using his private u-key), hence only allowing Bob to see that Alice wants to send him money. After constructing the final message, Alice's mobile application sends it along with information about the message recipient (Bob's username) to Leios Services, then waits to confirm the result message from Bob. If, after some predefined time, Alice does not receive it (or cannot receive it due to being offline), the money transfer process will be rejected.

2. In the second step, Bob will receive the message addressed to him. Bob can only receive it if he is online; otherwise, a predetermined amount of time, the entirety of the transfer will be rejected, as mentioned in the previous step. After receiving the message, Bob's mobile application will decrypt it using his private u-key. From the body of the message, the following will be relayed: the message relates to money transfer confirmation, the amount

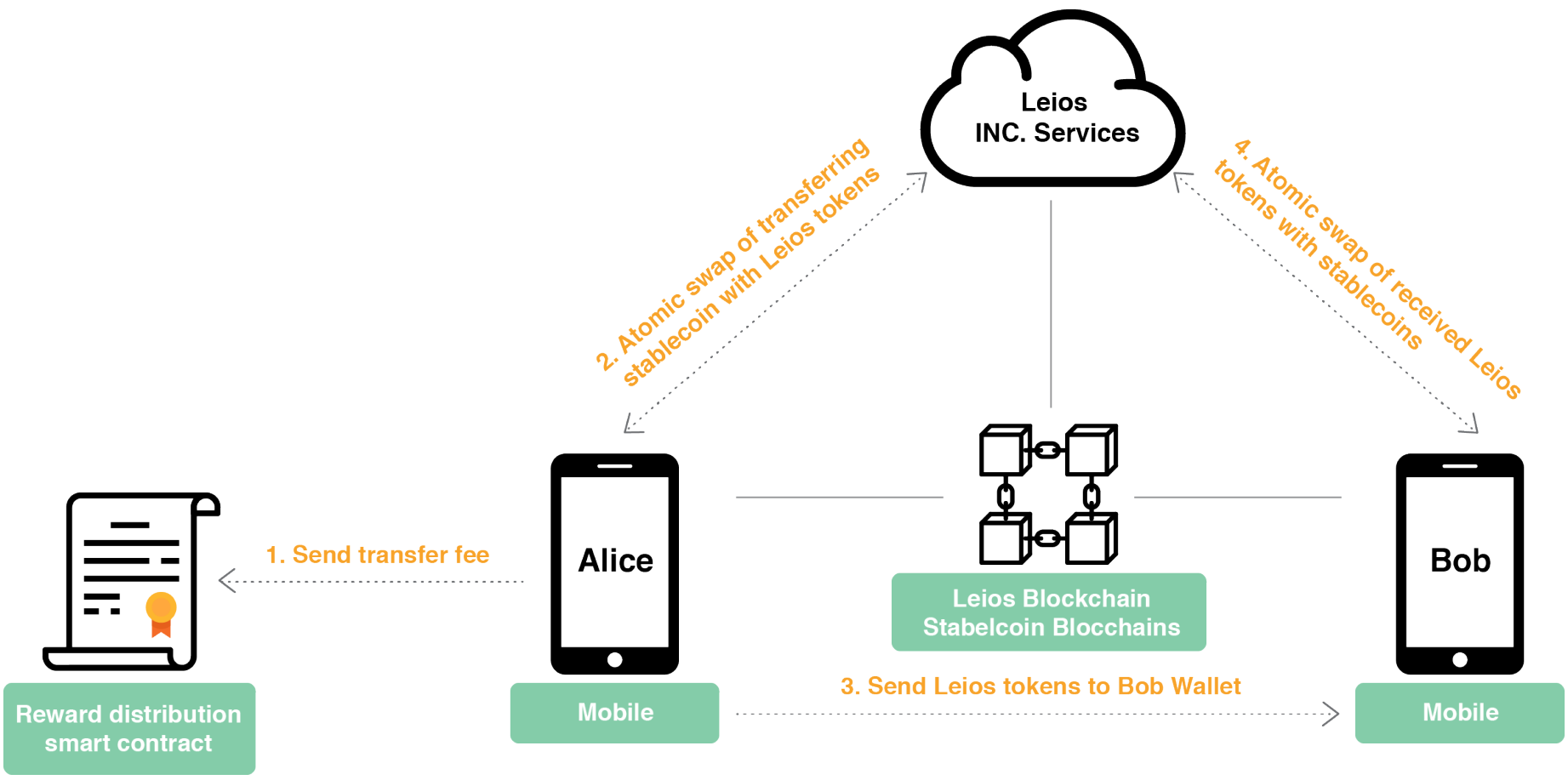
of money to be transferred, and the information about the transfer initiator (i.e. Alice's username and public u-key). After this, the digital signature will be verified (using Alice's public u-key) in order to confirm that the message was really sent by Alice. If everything is executed properly up until this step, then the mobile application will prompt Bob to confirm the transfer of $100 coming from Alice.

3. During the third step, Bob will confirm or reject the money transfer from Alice, prompting Bob's mobile application to prepare the appropriate result message addressed to Alice and sending that message to Leios Services. The body of the result message contains the transfer ID (found in the first message coming from Alice), username and public u-key of receiver (i.e. Bob), and the public address of Bob's Leios wallet where Bob is to receive the transferred LEIOS tokens (for details, please refer to Section 8.3). The digital signature of Bob (which is constructed from Bob's private u-key) is appended to the body, and then the final message is constructed by encrypting the result using Alice's public u-key. The final message can only be decrypted by Alice (via usage of Alice's private u-key), hence only Alice can see if Bob rejects or confirms her money transfer. After constructing the final message, Bob's mobile application will send it paired with information about the message recipient (Alice's username) to Leios Services.

4. During the last step, Alice will receive a message addressed to her (on the condition that she is online, as mentioned in the first step). After receiving this message, Alice's mobile application will decrypt it using her private u-key. From the body of message, it will be relayed that the message is related to the result of money transfer confirmation with the specified ID, along with the information regarding the message sender (i.e. Bob username and public u-key). After this, the digital signature will be verified (using Bob's public u-key) in order to guarantee that the confirmation result message was actually sent by Bob. The mobile application will show the confirmation result to Alice ("Transfer Rejected" or "Transfer Confirmed"). If the transfer was rejected, then the whole process will be interrupted. If confirmed, the money transfer phase will automatically be started.

8.3 Transfer

The money transfer process will be done according to the following diagram:



All transactions initiated in the blockchain will be signed locally in order to keep the wallet private keys local for the purpose of concealing them from anyone but the owner. The process will require the initiator of the transaction to be online in order to sign the transaction.

1. In the first step of the money transfer, Alice's mobile application will initiate the transaction of sending the required fee amount of the transfer to the Reward Distribution Smart Contract. For example, when initiating the transfer of $100, then $0.25 in the equivalent of the fiat-representing stablecoin will be sent to the Reward Distribution Smart Contract. This means the transfer amount is $99.75 (equivalent stablecoins).

2. During the second step, Alice's mobile application will perform atomic swaps to exchange the stablecoins with an equivalent value of Leios tokens. The second party participating in atomic swaps will be Leios INC, which will always have enough liquidity of Leios tokens (explained in Section 10). After the atomic swaps, Alice will have Leios tokens in her Leios wallet that she must send to Bob's Leios wallet. Her mobile application has obtained Bob's wallet public address during the fourth step of the confirmation phase.

3. During the third step, Alice's mobile application transfers her Leios tokens to Bob, for which zero-knowledge transaction capabilities of the Leios blockchain will be used in order to keep the money transfer untraceable between Alice and Bob.

4. Now that Bob has received Leios tokens in his wallet, the next step is exchanging them for stablecoins. In order to do this, Bob's mobile application initiates atomic swaps with Leios INC to swap his Leios tokens with stablecoins. The second party of the atomic swap will again be Leios INC, which will always have enough liquidity for the stablecoins. After performing this step, Bob will see $99.75 transferred into his wallet. If Bob is offline after the completion of the third step, then the last step will be performed as soon as Bob is online again.

9. The Leios Blockchain

In order to enable the core functionality of the Leios platform—namely efficient transfers of fiat-equivalent value between two entities—there must be a blockchain that has the following properties:

- Fast transactions
- Negligible or non-existent fees
- Publically untraceable transactions
- Proven security
- Fixed supply of tokens

To support all these features, a new blockchain will be developed based on Komodo technology. The following is an explanation of the key features and their reasons for implementation:

Short block times: Aside from the convenience of instantly receiving funds, this is also necessary in order to eliminate the minutes of suspense that normally elapse in many blockchain transfers before one can see their funds have been sent or received.

Z-addresses: This is one of the components of Komodo which the Leios Blockchain will inherit in order to ensure all transactions are private and the sending source cannot be viewed on a publicly accessible ledger. This will not interfere with the ability of the Leios Software to keep track of individual transactions on the bank or remittance company's private servers.

Delayed PoW security mechanism: This is to root the security of the Leios Blockchain into other proven PoW networks. Leios INC believes in focusing on proven and secure measures for all transfers, in order to eliminate any possible risk to any users of the blockchain.

Atomic swap compatibility: The ability to automate the exchange of different blockchain assets is the key component of the Leios system. Atomic swaps allow for the Leios Blockchain to act as an intermediary between stablecoins and other crypto assets in order to facilitate several of the key components of the system:

- The inclusion of private transactions onto any stablecoin or other atomic-swap compatible cryptocurrency.

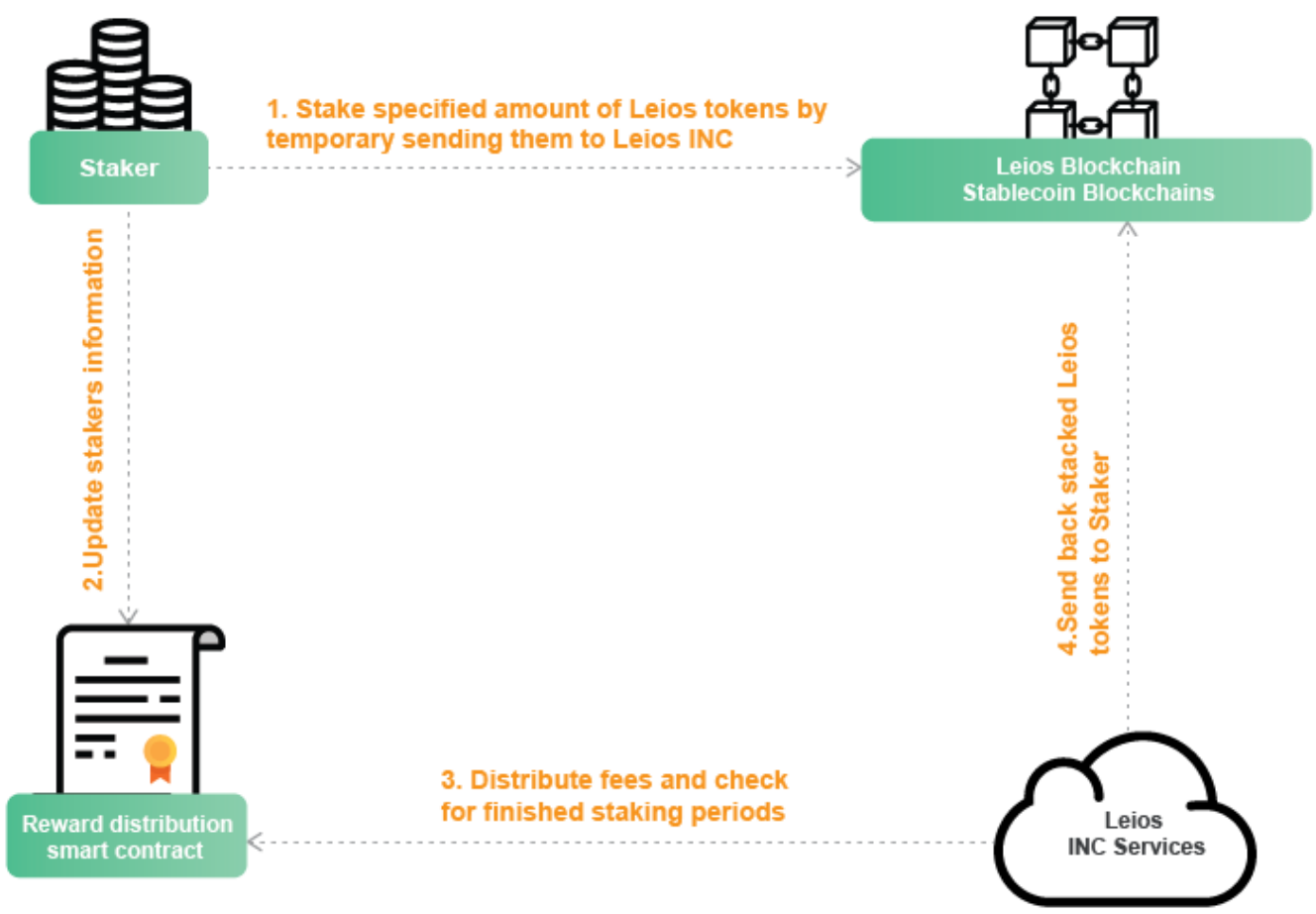
- The ability to hold stablecoins or cryptocurrencies of other blockchains in the Leios app while allowing Leios to manage their actual transfer through the Leios Blockchain.

- The inclusion of an automated point of payment from Leios users to Leios INC and the providers of the LEIOS tokens that facilitate the transaction.

- The ability to initiate a transaction in one stablecoin and conclude it in another. This will allow for stablecoin interoperability and choice flexibility. This feature can potentially be extended to all atomic-swap compatible cryptocurrencies in the future.

10. Staking

Any user who owns LEIOS tokens can stake them to help facilitate transactions within the Leios System. As a reward for their role in providing LEIOS liquidity, stakers will periodically receive a percentage (relative to amount of provided Leios tokens) of the transfer fee to their wallets. Staking is performed from the mobile application according to the following diagram:



1. The staker initiates the staking process in the first step via the mobile application by specifying the amount of Leios tokens which they are going to stake, along with the time period of staking. The staking amounts and time frame will be published using smart contracts to ensure transparency for all stakings. Then the staker's mobile application will generate the transaction into the Leios Blockchain to send the specified amount of Leios tokens to Leios INC. Leios INC will then use these tokens in order to create enough LEIOS liquidity to participate in the atomic swap transactions described in Section 8.3.

2. In addition to sending LEIOS tokens to Leios INC, the staker's mobile application also updates the Reward Distribution Smart Contract by adding information about the staking and the specified amount of LEIOS tokens for the specified time.

3. This distribution step is periodically performed by Leios INC for two reasons. The first is for the distribution of collected fees (in stablecoins) among all stakers along with the portion for Leios INC. The second reason is to check the staking periods for registered stakings. Any expired stakings will be removed from the Reward Distribution Smart Contract.

4. After finding an expired staking, Leios INC will also send back the staked Leios tokens to the staker to whom it belongs. They will be sent to to the Leios wallet of the staker by initiating the appropriate transaction in Leios blockchain.

11. Leios Pay: International Payroll Application

The same benefits brought to international remittance can also be brought to international payroll using the Leios System. Leios INC will adapt the Leios System to enable payroll service companies in the United States to pay employees in different countries via their local fiat currencies. The system will work very similarly, from start to end, to the remittance transfers facilitated by the Leios System. However, there are some notable variations that will need to be made to fit this alternative application:

1) Leios Link will be adapted with UI/UX changes that better suit a payroll application, such as additional features related to invoicing, tax documentation generation, and other adaptations driven to meet convenience and compliance standards.

2) There will be no need for a financial institution to carry out the transaction. The transfer process will resemble the stages of the individual wallet transfer process, where a user can directly send funds without the need for a third party.

12. Extending Privacy to other Other Blockchain Assets

Upon completion of the post-licensing models our mobile and web applications, and the Leios blockchain, users can theoretically send any cryptocurrency or blockchain-based asset that is supported by atomic swaps through our network. It would simply require us to integrate the

wallets for these cryptocurrencies into our applications in the same manner that we integrate our preferred stablecoins. A user can then login to their account and find options to send and receive these cryptocurrencies, in the same way as with our fiat representative stablecoin.

Just like our stablecoin, these cryptocurrencies will be atomically swapped into LEIOS and then swapped again into their original currency on their receiving end. This will allow for the transactions of any cryptocurrency to now carry the same privacy network benefits that were created for the Leios token and the stablecoins it supports. Furthermore, since the middle stage requires an atomic swap, it would also very easily allow for automated the exchange of different crypto assets through the same application.

The integration of non-stablecoins opens the door for the application to be a useful one to those familiar with blockchain, but is incompatible with our target remittance and other fund transfer users. Therefore, Leios INC will create an advanced version of the application for those interested in applying the privacy and general streamlined transactions to other cryptocurrencies. We can link these cryptocurrencies to our network of fiat gateways to allow for users to acquire or sell them with ease in supported locations.

Conclusion

Given the recent surge in cryptocurrency development, many new modifications to the original idea of Satoshi Nakamoto have emerged, all of which aim to add something to the versatility and usability of blockchain technology. We believe that the time has come to demystify the technology for enterprise fund transfer use. Combining many components of existing blockchain technology into a single transfer system, we can achieve one that exists to have maximum usability at a very wide-scale. A simple-to-interact-with blockchain system, a user-friendly interface, and an externally-run system to bypass fiat-related restrictions; these elements will combine to create the ideal union between fiat and cryptocurrency for everyday fund transfers.

Leios will eliminate any learning curve needed to use cryptocurrency for enterprises, and combine the familiarity of traditional e-finance with the unique advantages of blockchain. The successful implementation of this system will give overwhelming incentives to move beyond slower, more expensive methods available to anyone who uses traditional fund transfer services. These advantages do not require the financial institutions or their customers to have any interest in understanding blockchain or cryptocurrency. The system will gain widespread adoption solely based on its own merits of convenience and cost-reduction, perhaps being the first real bridge between blockchain technology and enterprise adoption.