

Deliverable 3 Proof – Project Report on Pilot Phase

KIC project the report results from	<i>Blockchain Solution for Incentivising Low-Emission Transportation (LET-Chain)</i>
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Summary/brief description of document	Records the results of the beta-testing of the LET-Chain
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Supporting documents:

Report

The logo for ETH zürich, featuring the text "ETH zürich" in white on a blue background.

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LETchain Blockchain Pilot Phase Description

Abstract

This document aims to describe the pilot phase to test the reception and functionality of the LET token in a real world environment with testimonials. For a description of terms used in this document consult «LETchain Blockchain Technical Architecture Blueprint».

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Description of test phase

After a successful deployment of the LET token on a local test-net the last phase of the project will be initiated by distributing LET tokens to testimonials on the Ethereum main-net. This pilot phase will conclude the proof-of-concept and feedback from testimonials will provide additional information for a decision on how to continue the project.

There will be six testimonials with different professional and tech know-how background. The diversification of testimonials helps to receive differentiated feedback. Here's an anonymized description of the testimonials

Testimonial I

Gender	male
Age	42
IT knowledge ¹	2
Branch	financial services

Testimonial II

Gender	female
Age	29
IT knowledge	2
Branch	industry

Testimonial III

Gender	male
Age	38
IT knowledge	5
Branch	IT

¹ 1 = poor, 5 = advanced

Testimonial IV

Gender male
 Age 45
 IT knowledge 3
 Branch NGO

Testimonial V

Gender male
 Age 42
 IT knowledge 2
 Branch graphic design

Testimonial VI (vendor)

Tbd

With these participants and the Blockchain Büro in the role of the admin (as described in the Blockchain blueprint) it will be possible to simulate the whole process: A small amount of money will be allocated to the participants in form of LET tokens which can be spent at the participating vendor. The participants will use desktop and mobile-Wallets to find out more about the usability of both.



Fig. 1: Desktop Wallet with LET token

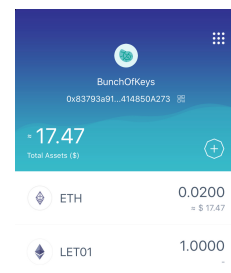


Fig. 2: Mobile Wallet with LET token

Deployment of the LET token on the main-net

After several pre-tests on a local test-net, Version 0.1a of the LET token has been deployed on the main-net. This means, the smart contract is ready to be interacted with over the Ethereum Blockchain. Users of the pilot phase will be able to receive and send tokens by executing functions on the contract described in the blockchain blueprint. The contract address is 0x22d5296A47b9585B71Cdb8be92841F3ea37dd2dd.

Transaction Information

TxHash:	0xe80e8829f602687f9b8c0fbedee65ac51e9a200980b584e26bd440846e8f165a
TxReceipt Status:	Success
Block Height:	5166500 (4 block confirmations)
TimeStamp:	1 min ago (Feb-27-2018 04:59:24 PM +UTC)
From:	0xbe61ce3423a122b00a3ab7346c2873e26f5a4fc4
To:	[Contract 0x22d5296a47b9585b71cdb8be92841f3ea37dd2dd Created] 

Fig. 3: Snapshot of deployment transaction

Source: etherscan.io

Tests

During the pilot phase several scenarios will be tested by executing the following functions from the deployed contract.

Transfer

Intended outcome: Tokens and fractions thereof can be transferred between the issuer (admin) and the participants.

Mint

Intended outcome: New tokens can be minted by the admin.

Burn

Intended outcome: Tokens can be permanently removed (destroyed) from a given address (Testimonial or token issuer).

Freeze

Intended outcome: A given account can be marked as frozen. Calling the frozen event (s. Blockchain Blueprint) reveals the address of a frozen account.

Output

Successfully being able to execute the described functions will define a positive outcome of the test. Furthermore, an interview with the participating testimonials will give hints about the convenience of handling the token and the willingness to use such an incentivize system. With the described setup it should be possible to run an analysis on how well the system works in a near real world environment.

Next steps

The participants of the pilot phase have been selected, for all but the vendor. Next, those will be gathered on the Slack platform to coordinate the tests. After this, every participant receives information about how to install their wallet (mobile or desktop) and eventually the simulation can start.