The BoT Connector.

- Orange's Live Objects
- Blockchain-of-Things SIM
- Smart NFT Token
- Oracle 2nd Generation
- BoT - Blockchain of Things
SmartKey is the missing part of the puzzle that connects the world of decentralized finance (DeFi) and blockchain with the world of physical assets.

„BoT“ Blockchain Of Things

We are the first working platform that can connect physical assets („BoT“ Blockchain Of Things) with DeFi projects based on the Ethereum blockchain.
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Smartkey_DeFi gate makes it possible to create new economic models based on ETH Smart Contracts carried out by hundreds of DeFi projects.
SmartKey - the connective tissue for the smart cities of the future.

SmartKey was created to maximize the opportunities offered by decentralized finance. The network will allow users to create new business models around traditional services such as carsharing, car rental, or home rental. A simple web page is enough to connect your business to the SmartKey platform.

The SmartKey platform combines Oracle II generation technology with BoT technology. This creates a unique smart contract in the form of a NFT token called SmartKey which defines the rules of access via an IoT device. The NFT-SmartKey contract is an IT record and manages activity.

The SmartKey project is a working BoT platform with multiple live integrations with household name brands and companies.
Vitalik Buterin’s Three Phases of Digital Value Development

**no. 1**
**Token Market and digital payments**
Passive digital value. Tokens become traded on exchanges and can be used for digital payments.

**no. 2**
**Tokens + DeFi in a closed ecosystem**
Working smart contracts are used on the Ethereum network. Decentralized economy (DeFi) projects that can use more advanced systems.

**no. 3**
**DeFi + BoT in a hybrid model**
Integrating digital assets to the physical world through the process of automatic access and management of these values. Ability to process digital payments without intermediaries and for the BoT (Blockchain of Things) to be a bridge to physical values. The use of DeFi projects in the physical world managed by digital technology, electronic data, information from sensors, and automated access.

**SmartKey is part of Phase 3:**
Blockchain projects that connect decentralized finance (DeFi) with the assets of the physical world will open up an entire new market. SmartKey is already a leading BoT network with proven real-world examples of its technology being used and will be at the forefront of this new market.
**SmartKey is a bridge for:**
- decentralized assets exchange protocols.
- active deposits, primary bank farm.
- dependent processes implemented between smart contracts linking deposits, processes, and DEX.
- other experimental economic models and processes.
- an attempt to connect blockchain with external databases.

**Barriers to BoT:**
Transactions between physical and digital assets often require multiple stages e.g. converting one digital asset to another and then converting a digital asset into FIAT currency. As it stands, value is lost at each stage of this transaction through intermediaries which charge (often high) fees and commissions. This dissipates value throughout the chain and erodes value for asset-holders.

SmartKey will act as the single bridge between physical and digital assets, significantly reducing the network fees accrued by asset-holders.

**Connecting the two sides of the market.**
Using smart contracts, Smartkey will enable limited-time-access and payment services to be fulfilled through IoT devices such as electronic locks and sensors, with full profile verification.

The SmartKey project focuses on heavily on automating billing and service access (e.g. unlocking cars for ride-sharing, providing secure home access to authorized persons via security gates).

SmartKey will provide the universal platform on which partners, companies, and individuals can build their own applications. This will allow for wide implementation of SmartKey in various business models.

As SmartKey requires a utility token, SKEY, in order to transact on the network, early investors in SKEY stand to benefit as the network grows.

**Blockchain oracle: connecting the smart cities of the future**
SmartKey is a decentralized oracle network that works on both the Ethereum and Waves blockchains.

Blockchain oracles are the bridges between the on-chain and off-chain world. They allow blockchains and smart contracts to access off-chain assets, making them far more powerful and interoperable. Using blockchain oracles, SmartKey will connect the on-chain world of digital assets, smart contacts, and DeFi with off-chain data, services, and devices.

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Digital currencies into FIAT model.
FIAT gate (exchange) - a middleman in the exchange process.
A NFT access token is a combination of three different technologies.

The first technology is BoT (Blockchain of Things). BoT is used to connect an IoT device’s unique IT record to the Blockchain. IoT devices can be installed in cars, gates, homes, parking lots, offices, parcel locker systems, and so on.

The second technology used to make the unique NFT token is the Oracle system. SmartKey uses a second-generation Oracle system. It can be used to verify elements that will affect the value, such as weather conditions or seasonality. It may be also used to verify information about the user such as his credit record. This is especially important when creating smart contracts in order to rent an apartment or a car. Verifying the user and his ability to pay for possible damages to the asset may be crucial in those cases.
What is a NFT Access Token?

The third technology that is used to create the access token is the Smart Contract conditions. Those conditions can be decided by the person issuing the contract with various levels of customization. These conditions include (but are not limited to): contract expiration time, time of access, price, rules of user verification, deposit amount, and others.

Combining those three technologies creates a unique smart contract in the form of a NFT token called SmartKey. The token defines the rules of access to a given physical value managed by an IoT sensor.

This value can then be sold using a simple website or application, traded on exchanges, or used to build new business models.

This creates a solution that will become critical to the sharing economy of the 21st century.

What is more, it will bring NFT tokens to a whole new level where they will be used for more than speculation. SmartKey technology will bring NFT tokens real physical value and utility to the world.
The SmartKey BoT connector supports two blockchain ecosystems: Ethereum and SmartKey's own blockchain. The choice of the gate, i.e. the ETH vs SmartKey smart contract, is made by the customer of the technology connector.

We partner with Chainlink as our oracle of choice. You can learn more about blockchain oracles and the SmartKey network on our Medium.

SmartKey BoT Connector Solution

is a platform already operating on the market and used by several international companies including Orange, Wekta, and Ferguson. It allows you to safely connect the digital and physical worlds using the BoT "Blockchain of Things" technology. We connect Ethereum Blockchain and SmartKey ecosystem with physical devices and software through the SM_BoT gateway.
Advanced levels of integration.

The SmartKey platform provides blockchain integration at two levels. The parties to the contract choose the solution, i.e. the level of integration with the blockchain.
Integration

Level I

Level I consists of services provided in a purely digital form, such as mobile applications, dedicated systems, websites, support systems, or passive sensors as well as supervision systems or data centers.

Level I is implemented by the SM_DeFL_API connector, which allows any mobile application to be connected to the Ethereum or Waves blockchain, or with software based on shallow integration (intermediary), an external client. It provides purely digital services such as mobile applications. Level I integration is modeled on payment platforms and task-oriented services.

Version 0.3 of SM_DeFL_API allows you to trigger off-chain actions with on-chain commands e.g. accessing securely located gates via an app. It creates the possibility to integrate with 1/3 of decentralized exchanges and ETH deposit contacts and payments for digital service.
Level II consists of advanced electronic services: connection of the payment and access application (operator), i.e. the performance of the contract, complete with a generated temporary access key.

Projects such as Airbnb platforms, carsharing, HotDesk offices paid by the hour, parking lots, controlled and limited paid access zones that use intermediary systems between the service provider and the recipient.

SM_DeFi_BoT version 0.7 Smart Contract allows for integration with advanced digital devices connected to the Internet.

The system in version 0.7 is dedicated to solutions with extended functionality, i.e. the possibility of receiving a signed Smart Contract ETH in the form of a SmartKey key that allows temporary access to physical assets.

The system generates smart contracts which define the rules of access, payment method, time (service completion date - access), and other dependencies that can be verified in digital form.

The service provider receives a digital payment and the recipient receives an electronic key in the form of a smart contract that allows temporary access to the physical assets, i.e. devices such as:
- camera, sensors.
- digital lock (access to the Carsharing, Car Rental, office, premises or apartment - Airbnb hotel).

Access and product management by interacting with the access right. Launching advanced services by generating the smart contract key.

Level II gives the possibility of developing more advanced economic models such as the sharing economy, i.e. building business processes and models based on complete automation of access contracted in digital currencies.
Opportunities

**SmartKey capabilities - BoT connector**

- Automatic access and the ability to build new models based on decentralized finance in the world of physical services.

- Opportunities to create new value projections, new services or markets for automated services combined with decentralized finances.

- Diversification of financing of physical world services, an alternative to payment systems or traditional banking operators.

- Harmonization, access to customers from all over the world thanks to the universal ETH data bus.

The platform allows you to create your own business models, your own systems such as carsharing, car rental or Airbnb services without the need to create your own advanced software. A simple web page is enough to connect your service to the SmartKey platform.

**Future market.**

By combining Blockchain of Things technology with decentralized finance (DeFi) SmartKey creates the possibility of integrating each verified Ethereum contract with solutions such as Airbnb, carsharing, HotDesk, parking services.

Limited, time-access services where smart contracts are a combination of a payment service, the asset providing company's profile verification service, as well as vehicle and digital key transfer system. The transfer of the key and physical asset (vehicle) is triggered by a smart contract.

The SmartKey project focuses heavily on automating the billing process and service access. All operations, from booking to access, are mostly carried out using simple systems such as sensors or electronic locks that can be easily connected to the SmartKey gateway by selecting integration level 1 or 2.

SmartKey is a project that was created to combine the above assets with access to the opportunities offered by decentralized finance today.
Token Metrics and Distribution.

Technical description:
- name: SmartKey (SKey) token, ERC20 utility
- platform: Ethereum (ETH)
- Supply: 1,000,000,000 closed collections
- SmartKey unit value: 1 ETH = 20,000 SmartKey (ERC20)
- price of the SmartKey unit 2.0 cents at the rate of 1 ETH = 400 USD

Launch

Phase I – project price evaluation.
Pre-Sales starting stage (20% - SmartKey)
Stage A Sale 10%, average price: 1 SmartKey = 0.0772 / 0.078 USD
Stage B Sale 10%, average price: 1 SmartKey unit = 0.025 / 0.035 USD
The process is implemented by a Smart Contract connected with the wallet of the company. The goal of this phase is to gain community supporting the project.
3 - 5% of ETH collected will enter Phase II as Pool Cover (Uniswap, Bancor).

Phase II – project price evaluation.
Enterance I offering in dex pools. (10% - SmartKey)
Stage A Sale 5%
Stage B Sale 5%
Minimal price: 1 SmartKey unit, price in a range of 0.0524 / 0.0558 USD (may be subjected to change) Expected operating reserve + 5% to keep liquidity (supply) highly valued. (may be subjected to change).

Phase III.
Entry to centralized exchanges.
Stock exchange – liquidity 5%.
Allocation, number of tokens.

Justification for the allocation of SmartKey tokens.

Sales restrictions:
- No possibility to purchase tokens by VAT payers. If you have purchased units or are going to, please contact us.
- Transactions over EUR 15,000 must be notified prior to their execution.

Crowdfunding

The process of obtaining financing for the project is carried out in the second phase.

**Phase I**

is gaining a community supporting the SmartKey project and its solutions.

**Phase II**

is the project's entry into the liquid market of open exchange of units in the form of creating a pool on the UniSwap exchange.

**Phase III**

is listing and maintaining liquidity for SmartKey units for the purposes of covering a number of risks associated with investing and securing individuals with SmartKey units.

BOT Global

The owner of the SmartKey project, the operator of funds obtained from the sale of SmartKey tokens. The funds guarantee the project development, administration (license, legal services, security, and economic audit of the company in accordance with the reporting standard of the organization in Estonia), maintenance of personnel, foreign representative offices, and project development. The company will undertake a number of activities to build partnerships, implementations, and analyze risks that affect project development.

Marketing

A set of marketing activities presenting the value of the project, its usefulness and its possible implementations.

In the first period of marketing and promotional activities, target markets will be covered for the purposes of creating a recognizable brand with function identification and value. The opening of offices - representative offices in Seoul that will announce the solution and obtain partnerships, which is a key implementation activity.

Team

Securing the team in the company. Allocation for the team will allow us to keep a team that is attractive in the labor market for competitive projects. The basic team is 11 people. During the project development, the team will increase to 25-35 people.
**SmartKey units**

- **BoTGlobal Company**: 30%
  - Pre-Sale Stage A: 10%
  - Pre-Sale Stage B: 10%
  - Reserve Liquidity: 5%
- **Team**: 20%
- **UniSwap**: 10%
- **Marketing**: 10%
- **Stock Exchange - Liquidity**: 5%
- **Reserve - Liquidity**: 5%

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30% - BoTGlobal Company  
20% - Team  
10% - Marketing  
10% - Pre-Sale stage A  
10% - Pre-Sale stage B  
10% - UniSwap (may be subjected to change)  
5% - Stock Exchange - liquidity  
5% - Reserve - liquidity
## Token Distribution

<table>
<thead>
<tr>
<th>Tokens owner</th>
<th>Shares held (%)</th>
<th>Date</th>
<th>token release value (%)</th>
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<tr>
<td>Company BoT Global</td>
<td>30%</td>
<td>2021</td>
<td>2.5% per QTR</td>
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<td>2022</td>
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<td>2023</td>
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<td></td>
<td>2024</td>
<td></td>
</tr>
<tr>
<td>Reserve - liquidity</td>
<td>5%</td>
<td></td>
<td>2.5% per QTR</td>
</tr>
<tr>
<td>Team</td>
<td>20%</td>
<td></td>
<td>1.5% per QTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2% per QTR</td>
</tr>
</tbody>
</table>

**Token Distribution Date**

- **Company BoT Global**
  - Shares held: 30%
  - Release schedule:
    - 2021: 2.5% per QTR
    - 2022: 2.5%
    - 2023: 2.5%
    - 2024: 2.5%

- **Reserve - Liquidity**
  - Shares held: 5%
  - Release schedule:
    - 2021: 2.5% per QTR

- **Team**
  - Shares held: 20%
  - Release schedule:
    - 2021: 1.5% per QTR
    - 2022: 1.5%
    - 2023: 1.5%
    - 2024: 2%
Allocation of funds

The project’s relational strategy consists of three components:
- SmartKey platform. Programming and technical tasks.
- Marketing activities, support, and communication concerning the project’s achievements regarding exchanges.
- Taking part in investor conferences organized by the crypto exchanges in order to report stories and milestone completion.

Promoting project value – Marketing:
- Promoting project value through partnerships and active promotional activities in target markets such as Korea.
- Information and advertising activity to create a project community and a group of ambassadors.
- Participation in industry events to present the value of the solution.
- Targeted participation in trade fairs of the automotive market and the hotel industry

Marketing:
- Acquiring partners interested in SmartKey technology.
- Promoting the product with partners and joint-marketing with partners such as KIA and Teltonika. These partners are the foundation of the company that will contribute towards better results in the second stage of obtaining funds.

Crypto exchange – liquidity support:
- Strategy of supporting the position of the SmartKey token on crypto exchanges.
- Active support of events organized by the crypto-exchanges for the purpose of presenting the SmartKey solution.
- Strategy to build investor confidence in the project.

Operating reserve:
- Crypto with financial resources for the purpose of undertaking extra-curricular activities supporting the effectiveness of implemented activities. Unforeseen risks.

All funds go to BoTGlobal OÜ (a company registered in Estonia).
Exchanges

Decentralized and centralized exchanges

Probit - Listed 12/2020
Sale in 2 rounds (5%)
Probit (created in 2016) is a stable, fast-growing exchange in the Asian market – mostly in Korea. Avg. daily volume 65/100M USD secures liquidity. Lack of barriers for SmartKey token listing on the exchange. Listings of Waves blockchain available. Strong partnership with exchange.

Metamask - SALE 10/2020
Smart contract between the buyer and the official SmartKey wallet.

KuCoin - Listed 19/03/2021
One of the Top 5 Exchanges

Uniswap - SALE 11-12/2020
Introduction to the SmartKey Ecosystem

In order to provide services within the SmartKey Ecosystem, it is necessary to own SkeyUSD technical tokens. At the time of account creation, each service provider’s SkeyUSD balance is 0. After authorization of the account, the Service Provider may purchase SkeyUSD tokens. This is done through the automatic exchange (autoswap) of SKEY (ERC-20) tokens, that must be purchased on the market.

AutoSwap and the SkeyUSD token

AutoSwap mechanism - The AutoSwap mechanism is used to swap SKEY (ERC-20) tokens to SkeyUSD tokens. The system causes the SKEY(ERC-20) token to be Locked, which means that the token no longer returns to the market.

SkeyUSD token

For example: In order to buy 100 units of SkeyUSD at $1 per unit, we have to pay a total of $100. The important part is that the payment must be made in SKEY (ERC-20) tokens. At $0.20 per SKEY unit, the fee we have to Lock is 500 SKEY.
Each NFT Access key will have its lifespan, after which it will lose its functionality. The price of generating a NFT Access key depends on its lifespan, which is counted every 1 minute. The longer the lifespan, the higher the cost of generating such a key. This cost is paid in SkeyUSD tokens.

Examples of services paid in SkeyUSD tokens (paid by the service provider):

- Blockchain Node registration
- Account registration
- A public description in the SmartKey MarketPlace
- Generating a device Access Key
- Device owner change
- Device activation / deactivation
- Device metadata changes
- Service Provider's dApp metadata changes
- Adding / Removing a key from a device whitelist

Main economic rules summary

Due to the fact that Cities and service providers bear the costs of maintaining the blockchain network, end-users do not pay any transaction fees for using keys and transferring them between accounts. Only service providers who generate revenue through the NFT keys in the SmartKey ecosystem bear the costs of creating those keys. Pro-social Organizations may create keys without any fees.
Types of SmartKey Ecosystem Users

**Service Provider**
- covers all costs of using the ecosystem
- is required to set up a Blockchain NODE
- pays for key generation
- earns its revenue on services provided

IoT device manufacturers, application providers, sharing economy service providers

*Business use - profit-making goals*

**Organization**
- covers costs of using the ecosystem
- is required to set up a Blockchain NODE
- city authorities, NCOs, public service providers

pro-social goals

**End-User**
- no transaction fee for using keys
- no transaction fee for transferring keys between accounts
- Pays only for receiving the key from the service provider.
  - e.g., renting a scooter, accessing a hotel room
  - e.g. individual users
  - customers - service recipients
NFT Access Key generation

Each NFT Access key will have its lifespan, after which it will lose its functionality. The price of generating a NFT Access key depends on its lifespan, which is counted every 1 minute. The longer the lifespan, the higher the cost of generating such a key. This cost is paid in SkeyUSD tokens.

Keys are created for each IoT device. Usually, such devices operate on the market for 5 to 10 years. If we generate monthly keys for the device, we will have to create a new key every month in exchange for the expired one.

The consequence of this is that each new device increases the batch of locked Skey (ERC-20) cyclically.

Factors that will impact the amount of locked SKEY (ERC-20) tokens:

New partnerships and new service providers that will join the Ecosystem.

- The number of devices connected to the system.
- The number of keys generated for each device.
- The cyclicity of generating keys for devices connected to the Ecosystem.
- Number of end-users utilizing the keys.
SmartKey Products.

SmartKey's vision is to lay the foundations for the smart cities of the future. In order to do that, we are developing a range of products, partnerships, and technical solutions. These products use the universal IoT / Oracle Standard system to connect devices, technologies, systems, and clouds to blockchain platforms.

Below are the main business areas for which we have created connectors combining IoT technologies with Blockchain and Oracles. We chose these areas due to the possible scale of implementation of our technology and the market value of possible implementations.

SmartKey’s products are more than just an application for each of our partners. Our solutions are a universal base on which our partners and later other companies or individuals can build their own applications. This allows for a wider implementation of SmartKey in various business models.

In the long run, it will benefit our investors because our cryptocurrency is a utility coin. This means that SKEYs are needed to enable connection with the blockchain to service providers.

Product development stages description:

1. **Analysis Stage**
   Business analysis of our product’s potential strengths, weaknesses, opportunities, and threats. The analysis stage helps the project team to identify business partner/client's needs and expectations.

2. **MVP Stage**
   Minimum Viable Product is a version of a product with enough working features to be usable by early adopters/consumers who can provide feedback. Quick feedback is important for effective future product development.

3. **Beta Stage**
   Beta testing is the first end-to-end testing of a product carried out by the SmartKey team.

4. **Implementation Test Stage**
   Implementation tests are used to provide the product to real users who can help with uncovering any bugs or issues that can be addressed before the final release.

5. **Release Stage**
   Launch of production version of the product.
This module is dedicated to partners and service providers that have a lot of assets that could benefit from being connected to the Blockchain ecosystem.

It will be used in management systems for hotels, home and office rentals, parking lots, and other zones with paid access.

Using the Business module, service providers can leverage automation and smart contracts to manage access to their physical assets. New economic models for your business will be possible in future smart cities using the SmartKey Business module.

SmartKey Wallet is a crypto wallet that can be used to save and manage access keys. The keys are generated by the service providers and sent to the device users’ wallets. The additional function of the wallet is sharing the keys between other users.

SmartKey Key Manager is a control panel dedicated to service providers. It allows to generate access keys for the devices and manage the IoT devices that are using our connector.

The operator of the applications and systems that provide his services can decide on the parameters of the keys. In other words, he creates smart contract parameters such as: access time to sensors or devices, contract expiration date, access cost, user verification, or any other parameters relevant to a given service.

The service provider (resource owner), for example, a hotel, creates a contract model that he will put up for sale. The given contract is a digital equivalent of the service performed by the operator. When creating the contract, the supplier will select basic parameters such as: a period of access to the service, method of user verification, and defining the currency of payment for the service (e.g. SKY, ETH, USD). The contract will be visible in the wallet for managing basic keys or paid services. Keys can be created based on the economic parameters of the provider. For example, the key can be paid or free.
Our Rental module is designed specifically to meet the needs of automotive and transport businesses. With the Rental module, users can automate access to their fleet of vehicles for rental or other purposes.

Our service module is designed to manage access to private assets such as residential properties. This can be to provide limited access to trusted services such as couriers, builders, cleaners, and repair teams. Using the Service module, users will be able to provide access to multiple authorized persons or companies without the need for multiple keys or devices. The big advantage of using our technology in providing access to residential areas is the ability to issue virtual keys with a set expiration date. A good example of the usefulness of this system is giving access to a building to a repair team.

SmartKey's Rescue module is used by emergency services to reduce travel time to the scene of an incident. Rescue opens gates to guarded communities using the SmartKey network. This solution eliminates the need for emergency services to track down the key holder before being able to enter a restricted zone. The system allows for opening gates to guarded communities by combining the functionality of Blockchain technology with the Internet of Things (IoT).

The Rescue module is already released and used in the Warmian - Masurian region of Poland. The SmartKey project assumes wider adoption of this module in the near future.
In order to connect to the SmartKey technical blockchain, each of the Partners is treated as a ‘provider’ of a new service, which must implement elements of the SmartKey architecture on its side, such as:

- REST API as an interface for managing the main dApp of the provider.
- Listener that listens to events on the provider’s dApp and sends a signal to the IoT cloud with the command at the right moment.
- The elements that consist of the entire ecosystem called Oracle

Technological description of the integration of technological partners with the SmartKey technical blockchain
After connecting to the Oracle, partners can communicate and transfer data via Blockchain and SmartKey dApp.

The tangent element of both providers is the Blockchain and the device keys (tokens) generated in it.

For proper operation, each of the elements is described with procedures for easy and intuitive integration of the Partner with the SmartKey ecosystem platform. One of the main procedures are, among others, the following processes:

- setting up a user account, i.e. a wallet from a dedicated application

  Mobile App

  Blockchain

  create user address request

  return new address
export class Account {
  readonly address: string;
  readonly publicKey: string;
  readonly privateKey: string;
  readonly seed: string;

  constructor(seed: string) {
    this.seed = seed
    this.privateKey = Crypto.privateKey(this.seed)
    this.publicKey = Crypto.publicKey({ privateKey: this.privateKey });
    this.address = Crypto.address(
      { publicKey: this.publicKey },
      config.skey.chainId
    );
  }

  static random() {
    return new Account(Crypto.randomSeed(15));
  }
}

export const formatError = (err: any): string => {
  switch (err.error) {
    case 1222:
      return "Your account doesn’t have enough funds";
    default:
      return "Unknown error";
  }
}

// The convention is that it has to have 15 words, all lowercase and delimited by spaces
export const validateSeed = (seed: string): boolean => {
  if (seed.trim().split(' ').length !== 15) return false;
  const lowercaseOnly = /^[a-z]+$/g;
  if (!lowercaseOnly.test(seed)) return false;
  return true;
}

export const fetchBalance = async (address: string): Promise<number> => {

• Adding an IoT device

Partner

INTERFACE APP

REST API

Blockchain

create device request

get blockchain address

return new address

set device account script

response - 201 OK

setup device on IoT Platform
• Generating and transferring the SmartKey key

**User Application**
create key for device
request (valid to param)

**INTERFACE APP**
issue NFT token on dApp
response 200
add key to device whitelist
response - 200 OK

**REST API**

**Blockchain**

transfer Key (new NFT token for device)
The technologies that combine to create the NFT access token are as follows:

BoT (Blockchain of Things). BoT is a combination of Blockchain functionality and Internet of Things devices. IoT devices are becoming more and more common in the world that surrounds us. Examples of where such devices can be installed are gates, cars, parking lots, parcel locker systems, apartments, and buildings. Our project is focusing mainly on devices that grant access to assets but is not limited to them.

Oracle. A set of servers that are used to retrieve data from the internet and store it on the blockchain in a form of a smart contract. On the previous graphs, the PROVIDER API and the LISTENERS are our solutions Oracles. In the case of SmartKey, Oracles can be used to verify elements that will affect the value of the Smart Contract such as weather conditions or seasonality. They can have also other functions like verifying the parties of the smart contract. An example of this would be a case in which the Oracle is used to make a contract that will be validable only when it’s raining. The Oracle will connect to the internet to check the weather conditions and then decide if the contract can be executed.
**Contract conditions.** These can be decided by the party issuing the smart contract. They can include:

- Time in which the contract is validable. For example, the access to a hotel room may be active from 4 pm to 10 am the next day.
- Contract expiration date. For example, a car may be accessed for 24 hours.
- Payment and payment method. SmartKey will give its users access to gates linking various cryptocurrencies as well as F.I.T payments.

NFT Access tokens are unique non-fungible keys made out of the combination of above-mentioned technologies. The key can then be:

- Rented
- Sold
- Traded

Used to form new business models based on Sharing Economy – car rental, Airbnb services, etc.

Used in other business models based on providing access to assets – parcel lockers, storage lockers, etc. And so on.

Used by a company for asset access managing – for example giving their employees access to the companies office.

Used by an individual person for his own needs – like opening and closing a house or giving access to an apartment to the cleaning services.
All documentation describing the processes will be published in Q2 2021 on GitHub along with the source code of the solution.
Project Partners

Orange
Orange Polska is one of the most popular telecoms in Poland.
In addition, the company also deals with IoT solutions and their implementations.
Orange already has 2 million M2M IoT solutions and a wide range of satisfied users.
Currently, almost 80 cities are using Smart City solutions provided by Orange in Poland, which continues to grow.
Their solutions had a positive impact on the daily lives of many residents.


Chainlink
Chainlink and SmartKey are proven blockchain technologies that aim to revolutionize the IoT market and connect future smart cities. Chainlink is SmartKey’s blockchain oracle of choice.
By simplifying how smart contracts access off-chain resources, Chainlink is accelerating the development of useful IoT smart contracts. SmartKey takes Chainlink’s capability a step further by enabling easy connections to physical devices performing key IoT-enabled services.
The partnership of SmartKey and Chainlink will open up new data-driven smart contract use cases in IoT, such as automatic activation of emergency response systems during bad weather conditions, authorized access to gated municipal areas when city-wide alerts are issued, and many other possibilities.
You can learn more about blockchain oracles and the SmartKey network on our Medium.


GeoDB
SmartKey will deliver car and mobility data via GeoDB to data-buyers representing big data & market intelligence segments, such as AboutGoods, Abacus, Nisgo, Flame Analytics, and DataLytics. These buyers will in turn use SmartKey to provide data-driven analytics to leading global brands such as Carrefour, McDonald’s, Telefonica, Audi, and many others.

Over time, SmartKey will grow to provide smart city and smart home data: including utilities, weather controllers, pressure sensors, temperature gauges, liquid level movement, and mobile solutions (GPS and CSM).

You can read more about the SmartKey + GeoDB partnership on our Medium.


**Project Partners**

**Wekta**

Our integration with leading intercoms manufacturer, Wekta, will give over 3.5 million households across Poland the ability to use SmartKey to control video cameras, home access, garage access, and safe and secure access to other areas using Wekta technology.

All households using Wekta intercoms can benefit from seamless access control with SmartKey. Residents and landlords can grant access to courier and delivery services, taxis, and tradesmen without having to call, exchange keys, or be on site. Access can be granted for a limited time period (e.g. for a delivery or home movers) offering a greater degree of security.

You can read more about the SmartKey + Wekta partnership on our Medium.


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**Teltonika**

Teltonika’s bestselling GPS trackers (FMB920) are mounted on every single emergency vehicle, as well as closed district and private property barriers, gates, and building intercom systems.

Integration with SmartKey will allow users to track their device’s location and control the corresponding locks via GPS and remote commands sent from the mobile app through the SmartKey network.

In partnership with Teltonika, the city of Olsztyn in Northern Poland became the first in the world to successfully introduce SmartKey-controlled building access for municipal emergency services.

You can read more about the pioneering project on Teltonika’s website.


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**Ferguson**

Ferguson is a global manufacturer and distributor of consumer electronics, established in 1989. It sells 300,000 SmartKey-enabled devices every year.

Ferguson will implement the SmartKey technology in all its SmartHome devices, which use intelligent solutions, fully configurable to the user’s needs, increasing comfort and automating their use. We are talking here, among others, about security systems, SmartEye cameras, Wi-Fi video intercoms, smart remote controls, or E-mio electric scooters.

All these devices will now be compatible with the Ethereum and Waves blockchain systems.

You can read more about the SmartKey + Ferguson partnership on our Medium.

Ferrum Network

Ferrum Network is a part of a new product solution. The new implementation will be based on the active deposit and active investment model that will be used in the modern sharing economy of the cities of the future. The SmartKey ecosystem will provide transparent mechanisms for gaining access to physical assets while users will be able to use staking mechanisms in their own business models.

Modern economics is based on the sharing of physical goods. Blockchain can automate deposit and investment processes in the modern economy of the physical world while a deposit product is often needed and can be paid in the form of tuxedo mechanisms.

https://ferrum.network/

Oasis Bloc

OASISBloc is a blockchain-based data trading platform. OASISBloc aims to create collaborative value by providing a global data trading platform due to the increase in demand for access to global data and to overcome limitations of current blockchains which are focused on each industry domain. Every Domain Chain plays a given role as a fundamental and core member of the OASISBloc platform and receives various benefits. OASISBloc supports SmartKey with users' data and legal documents processes to enable full access control and make sharing economy available to mass users.

https://www.oasisbloc.io/
Check out our videos:

- Smartkey Connector - How does it work - Explainer Video
  https://www.youtube.com/watch?v=102wLyf7M8E

- Solution for Smart Key Emergency Service - Ethereum Blockchain
  https://www.youtube.com/watch?v=ji7ZQpD6XQ8&feature=emb_title

- Smartkey solution presentation for Airbnb (Korean version)
  https://www.youtube.com/watch?v=jC7YQpD6XQ8&feature=emb_title

- Payment for renting a Mercedes with the DeFi service
  https://www.youtube.com/watch?v=kappqGoG7F8&feature=emb_title

- Presentation of the Smartkey solution for the project partner KIA corporation.
  https://www.youtube.com/watch?v=U2FhHDR296w&feature=emb_title

- Project presentation for the Korean community.
  https://www.youtube.com/watch?v=VvWFM5dG7aM&feature=emb_title

Famous YouTubers talk about our project:

- BitBoy Crypto - One Crypto Project Changes Everything (KEY To The Future)
  https://www.youtube.com/watch?v=16gKs6Tj1pw

- BitBoy Crypto - 7 Coins to $7 Million Dollars in 2021 (Teeka Tiwari DeFi Picks)
  https://www.youtube.com/watch?v=0dUic8xSiY

- Крипто Батенька - Какую криптовалюту купить в 2021 году? Smart Key сделал 30K и это еще не предел
  https://www.youtube.com/watch?v=x089m_1wM&feature=emb_title

- Крипто Батенька - SMARTKEY и CHAINLINK объединили в сотрудничестве
  https://www.youtube.com/watch?v=VvWFM5dG7aM

- DavinciJS - OMG! EPIC MOVEMENTS IN THE BITCOIN AND CRYPTO MARKET IMMINENT!!! [here's what I am buying]
  https://www.youtube.com/watch?v=VvWFM5dG7aM

- Made in Blockchain - Smartkey platform, which allows to connect with another physical product
  https://www.youtube.com/watch?v=VvWFM5dG7aM
Company, Legal disclaimer.

Project implemented by the company:
RoTGlobal OÜ (registry code 14808450):
Estonia, Tallinn, Keskilinna linnaosa,
Maakr tn 19/1-7K, 10145

Security - project reporting.
The company operates in accordance with the European Union law regarding the principles of accounting and reporting. Financial data and risk reporting by a certified auditing company, CIA audit standard (Certified Internal Auditor).

Contact:
Information
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Trade & exchange support
trade@smartkeyplatform.io

Integration and tests of the SmartKey platform
support@smartkeyplatform.io

This document is not an issue prospectus, an offer to take up shares in a project, to sell property rights on the basis of Estonian or other country's jurisdiction. By purchasing SmartKey tokens, you acquire the possibility to use the SmartKey system services of the blockchains or application as well as platforms and solutions that will be created in the future using SmartKey technology. You will be able to use the BOC platform as a private individual, entity, organization or company. SmartKey tokens allow access to the platform's technological resources and its capabilities.

Social Networks:

Twitter
https://twitter.com/SmartKeyDeFI

Youtube
https://www.youtube.com/channel/UCl6oK-SxW9waYFAXBo466B

Reddit
https://www.reddit.com/r/Smartkeyplatform

Telegram
https://t.me/SmartKeyNews
https://t.me/SmartKeyChat
https://t.me/SmartKeyChat_Korea
https://t.me/SmartKeyChatRU
https://t.me/SmartKeyChat_IN
https://t.me/SmartKeyChatID
https://t.me/SmartKey_Vietnam

Discord
https://discord.com/invite/xe2SYH2Z

Medium

Kakao Talk
https://open.kakao.com/o/dqfzwwnt
https://open.kakao.com/o/jko4h0