

## TRANSTECHNOLOGY CORP

### TOKENIZED REAL ESTATE

We bring innovation to real estate markets by implementing blockchain technology in the real estate marketplace and crowdfunding business models. Our goal is to promote blockchain and cryptocurrencies to the mass market by solving the traditional problems of investments in real estate. We look forward to a brilliant future where all real estate registries are based on blockchain technology and can be combined into a transparent and secure worldwide distributed ledger that allows users to trade real estate fast, without intermediaries and with low transaction costs. We are eager to partner with all government and private projects to make this future come true faster. Although direct interaction with governments is very important in the long term, business is much faster to adopt innovations, especially when they directly affect financial results. Promotion of blockchain technologies to business leaders will increase the lobby for further steps in the adoption of blockchain registries. We offer real estate market players our Protocol for real estate tokenization, and the Platform for exchanging tokenized real estate assets. Tokenization enables trading real estate in small fractions, and makes it accessible as a result. Sellers attract new buyers who could not afford to buy real estate before, didn't have the opportunity to invest internationally, didn't want to bear high transaction costs, or wanted to pay for real estate with cryptocurrency. Buyers are additionally motivated by the transparency and liquidity provided by the secondary market within the Platform and the secure transaction records stored on the blockchain. TRANSTECHNOLOGY - makes it possible to buy and sell tokenized real estate assets in a trusted, fast and smooth manner with instantaneous transactions and low transaction costs. Any real estate owner can list his property or any fraction of it on the Platform, and anyone can become a buyer as the entry ticket is very low. We are the first real estate tokenization project with a viable B2B marketing strategy. We will provide our solution to real estate developers, investment companies and brokers. As they are interested in

### 3. TRANSTECHNOLOGY - Solves the Main Problems of Traditional Real Estate Investments

The total value of world real estate reached \$217 trillion in 2015 and is worth nearly 2.7 times the global GDP.<sup>1</sup> This number includes only developed real estate, and would have been much larger had we counted the vast amount of undeveloped land around the globe. Although the real estate market has plenty of opportunities for making big gains, investing in real estate is a lot more complicated than investing in stocks and bonds. Several major problems and barriers persist in real estate markets:

- High threshold for entry
- Lack of liquidity
- Slow and complicated process of ownership transfer
- Lack of price transparency
- Risks of fraud
- High transaction costs
- Complications of cross-border transactions

All of them have been addressed many times throughout history. New investment vehicles have been invented which solve some of those problems, but there is no perfect solution, and the real estate market is still the most inefficient one compared to other asset classes. Around the world in dollars and cents

### 4. Both Crypto and Traditional Investors Benefit From the TRANSTECHNOLOGY - Solution

Real estate tokenization on blockchain technology is the next step in the evolution of real estate investment. Our goal is to make our tokenization Protocol the industry standard for property tokenization. Crypto investors will benefit from:

- Access to real estate investment directly without leaving the crypto universe
- New diversification opportunities between crypto and fiat exposure, which are especially in demand during downturns in pure crypto markets
- The opportunity to buy real estate for personal use directly with cryptocurrency without conversion costs and access to foreign markets

Traditional investors will benefit from:

- Access to a new class of asset previously unavailable to most of the population; the minimum

investment threshold for investors is significantly decreased, democratizing the entire real estate investing market • Higher liquidity and price transparency, as tokenized assets are easily exchangeable and property tokens can be traded on our user-friendly Platform or anywhere else • Using jurisdiction-agnostic property tokens, enabling cross-border transactions and allowing people to purchase real estate in other regions beyond their domestic jurisdictions • Having a public market for every real estate property, which makes market pricing transparent and reduces information asymmetry between professional and retail market participants. • Registering all transactions in single public blockchain, which will eliminate fraud and unintentional accidents related to conflicting ownership registries • The ability to easily buy and sell properties in pieces, which will not only make the market more liquid and efficient, but will also unlock entirely new possibilities for real estate owners; for example, borrowing money on the open market using only a portion of their real estate as collateral • The opportunity to diversify their portfolio, not only between different classes of assets but also within the real estate asset class; better diversification provides higher returns at the same level of risk

## 12 5. TRANSTECHNOLOGY - Solution Targets Broad Audience With Different Problems: Crypto Investors, Middle Class, Traders, Crypto Whales and Institutional Investors

### 5.1 Crypto Investors Gain Easy Access to New Assets

The number of people using cryptocurrency today has seen significant growth and rivals the population of small countries. It is impossible to know precisely how many people use cryptocurrency but all the studies show that there are millions of unique active users and the number is expected to grow exponentially in the next years. We see the growing demand from them for the diversification of assets to fiat exposure without leaving crypto universe. During downtrends in crypto markets protective assets are being especially needed. Real estate backed tokens are the best option to meet those needs.

### 5.2 Everyone Can Invest in Real Estate (Middle Class)

Historically, the global real estate investment market has only been available to a small subset of investors. Large investment funds, corporations and high net worth individuals had almost exclusive access to this asset class. In addition, costs in real estate transactions can be as high as 30% of the property price, with many intermediaries earning up to 100% profit margins. This is not fair, and TRANSTECHNOLOGY - will provide unprecedented access to the global real estate market for most of the population, who could not participate in this economy before.

### 5.3 Traders Identify Arbitrage Opportunities and Make Profit

TRANSTECHNOLOGY - makes no recommendations about any particular investment, but the Platform provides investors with tools, relevant information, market data, sponsor information, property information and third-party information. Traders will do their own due diligence and research when making decisions to buy undervalued tokens and sell overpriced ones. Higher liquidity and price transparency enables trading real estate like shares or bonds.

### 13 5.4 Buy Real Estate With Their Cryptocurrency.

Many early Bitcoin and Ether miners and investors have made a fortune. In addition to the motivation of all crypto investors to reduce exposure to crypto assets and diversify their portfolio, they need a convenient and low-cost way to buy expensive real assets. While a growing number of merchants worldwide are accepting cryptocurrency as a payment method, and there are some projects allowing customers to pay by card directly from a crypto wallet, those payments are limited in size. The TRANSTECHNOLOGY - Platform will provide users with the opportunity to buy real estate all over the world for personal use.

### 5.5 Institutional Investors Increase Their Deal Flow and Earnings, Providing Others Access to Higher Profile Deals

Institutional investors can increase their deal flow through virtually outsourcing part of their job to find lucrative real estate investment opportunities to TRANSTECHNOLOGY - Also, institutions can earn a higher return through negotiating special investment terms for being cornerstone investors providing a substantial part of the fundraising amount. It is a “win-win” solution as other investors are ready to give

away a fraction of their return to gain access to higher profile deals. Also, the participation of institutional investors, who always carry out their own due diligence, increases the confidence of smaller investors that may lack professional investment expertise. The share of institutional investment in the real estate crowdfunding industry varies from 25% in the UK to 73% in the USA.<sup>2</sup> The focus on institutional investors will allow the Platform to grow more rapidly. We expect that institutional investors will account for more than 30% of property tokenization.

Traditional option  
TRANSTECHNOLOGY - Transaction costs 30% 2% Transaction time 1 month 1 click Available options  
Country of residence Whole world Entry ticket \$100,000 \$100 Protection from fraud No Yes Ease of use Complicated Transparent. Real Estate Crowdfunding: Gimmick or Game Changer? 14 5.6 Use Case: Mike Buys Fractions of Several Ocean Villas With Just \$25,000 Mike is 37. He works as a manager in an IT company and is a typical middle-class man. Currently, he is seeking to invest his savings of 25,000. Mike is cautious of risks because he is a father of two and rather reluctant to bet all his hard-earned capital on some opportunistic venture. He already has a broker operating on his national stock exchange. Now Mike is considering alternative investments to diversify his portfolio and to obtain higher returns at the same level of risk. He knows that he wants to focus on short-term rentals due to the soaring demand for Airbnb and other online marketplaces. Mike's wealth is not enough to purchase such property, and he is not allowed to invest in private real estate vehicles under his country's laws he does not qualify as an accredited investor). The only option Mike can afford is REIT shares on the stock exchange. Mike does some research and finds out about their price volatility. Plus, in times of financial instability they're just as vulnerable as his other equity shares, and there's the possibility of asymmetrical pricing (the private market value of the underlying real estate can be several percent below what the trading value is). Also, he does not want to be a "blind" investor, unaware of which real property he owns. Part of the reason TRANSTECHNOLOGY - exists is to help Mike and other people struggling to access the exclusive world of real estate. With TRANSTECHNOLOGY - Mike figures out the best options available for him through the online Platform. He selects several ocean villas in Indonesia, England and the Jamaica, instantly purchases their tokens from the secondary market within the Platform, and now owns a diversified portfolio. Mike completes this miraculous transaction within one hour without having to bother about all the paperwork and legal issues he would have definitely faced otherwise. He can sell his tokens anytime in the secondary market.

5.7 Use Case: Jonas Jones Quickly Gets a Diversified Worldwide Portfolio Including a Penthouse in Miami Jonas Jones, an early Bitcoin and Ether enthusiast and investor, has accumulated considerable wealth, mostly by investing in cryptocurrencies. In order to diversify his portfolio and lock in profit from crypto asset appreciation, he wants to purchase real estate. He's not an expert in real estate investment, and does not understand how complicated and expensive the process can be. He considers selling crypto assets for fiat currencies (several million US dollars or Euros) and investing them in real assets. After consulting with his lawyer, he finds out that he cannot withdraw his money from the crypto exchange despite complying with all its KYC and AML procedures, as his country does not have legislation that would allow him to confirm the source of income to authorities. Even if those regulations existed, or he used some legal loopholes or gray-area scheme, it would incur transaction costs of at least 5-10%, which pales in comparison to the possible taxation, and that would still not guarantee the absence of legal problems. There would be a huge fee just to withdraw the money, and the time-consuming process of purchasing real assets, <sup>15</sup> involving new fees and other expenses, had not even started. He is reluctant to lose half of his assets' value due to transaction costs. The only option to lock in the crypto profits he's left with is to sell the cryptocurrencies and keep the proceeds in his account at a reliable digital asset exchange without any exposure to income-producing

real assets. TRANSTECHNOLOGY - introduces a new way to get exposure to real estate. Jonas Jones converts his cryptocurrency directly into ALT tokens in the same digital asset exchange. Essentially, he swapped his cryptocurrency for exposure to real estate located all around the world and producing income nominated in fiat currencies. Although ALT tokens are not backed by assets directly, they can be exchanged with property-backed tokens on the Platform at any moment. He reached his investment objective in a few minutes without any of the transaction costs described above. Later, he saw the apartment of his dreams in Miami listed on the Platform, and easily converted part of his TRANSTECHNOLOGY - tokens into 100% of the penthouse's tokens, making his dreams come true in one click.

### 5.8 Use Case: Recent Graduate Collin Finds the Way Around Structural Barriers to Invest in Lucrative Properties

Collin Lin, recently graduated and working as a specialist in the Financial Futures Exchange, has been there for a year now. He is a young but very ambitious investor, having already managed to build a diversified portfolio across all the channels available to him. As a financial advisor, he is aware of the fact that demand for real estate is huge in his country: the average price on the residential market in the capital has skyrocketed by 100% in just 5 years. He has accumulated just enough capital to meet the minimum 20% down payment for a mortgage set by the government last year. But even tougher new regulations have put Collin's investment plan into question: now the minimum down payment has increased to 30% (if it was a second home, it would be 60-80%). He has a friend in a smaller city and considers this cheaper location. Unfortunately, the local government has made loan applications conditional on evidence of at least one year of tax returns in the city, plus evidence of residence and employment, making it impossible for non-resident buyers to invest in the market. Totally frustrated, Collin approaches agents to learn about real estate opportunities overseas to get past the government's restrictive policy. He's offered the four most popular locations: Portugal, Australia, New Zealand and Florida. Collin likes everything about the idea of investing in these markets, except for three things: 10% agents' fees, plus the bulk of other expenses which can push transaction costs up to 30%, and now he needs an even bigger loan. With TRANSTECHNOLOGY - he investigates dozens of lucrative real estate opportunities at home and overseas without redundant restrictions or prohibitive transaction fees. Through TRANSTECHNOLOGY - he is introduced to the blockchain and crypto worlds. He's now able to create a sophisticated high-yield portfolio. It turns out that Collin's savings can get him exposure to several properties in his country's capital, as well as all of the overseas locations mentioned by the agent, which means he has a portfolio that's diversified on two levels : geographically, and within each territory.

## 16 6. TRANSTECHNOLOGY - Protocol Is Ready to Use Within Current Legal Framework

### 6.1 TRANSTECHNOLOGY - Tokenization Protocol Can Become Industry Standard

The TRANSTECHNOLOGY - tokenization Protocol is a combination of smart contracts, technologies and legal structures used on the Platform and offered as a turnkey solution to the wide range of players in the real estate market. The Protocol allows developers, brokers, investment companies and other property owners to access new markets and sell their property or raise financing faster and on better terms.

### 6.2 TRANSTECHNOLOGY - Real Estate Investment Structure Is Straightforward

- Developers, brokers, investment companies, and any other property owners list their properties on the TRANSTECHNOLOGY - Platform and/or their own websites for tokenized sale
- Property-specific tokens are issued and sold to the buyers
- Property-specific tokens are traded in the secondary market in the TRANSTECHNOLOGY - Platform or any other exchange, or in peer-to-peer deals
- All tokenization, transaction, management and any other fees are payable exclusively with ALT tokens

### TRANSTECHNOLOGY - Platform Structure and ALT Token Circulation: 17

### 6.3 Use Case: Investment Company Sells Property Faster Than Ever

REIC LLC is planning on its next real estate investment project.

3 years ago it invested in the development of a prime office building in London. The building is now ready and 50% of the space was sold or leased out during the construction period. The project is quite successful and it is expected to reach 100% occupancy at the projected rental rate in 6 months, but REIC has gone slightly beyond its budget and now lacks the liquidity to make the next promising investment. The company is limited on debt-financing opportunities by previous loans' covenants. The CFO decides to sell out part of the project to gain the necessary liquidity. Currently, sales of such properties take at least several months, and he's looking for new sales technologies, because the other project may be outbargained by competitors. TRANSTECHNOLOGY - Platform lists one floor of the building, promising to sell it within 45 days. As the platform gives access to investors all around the globe and demand for exposure on prime offices in London is high, this tokenized property is easily sold ahead of schedule. REIC not only receives the funds, but now also has a unique price discovery instrument for the building, as tokens are traded on the secondary market, and the current fair price for a square meter is determined by the market. REIC joins the community and integrates the TRANSTECHNOLOGY - Protocol as one of the sales channels. Now, company properties are listed both on its own website and on the Platform, which makes the tokenized sales even faster and promotes the TRANSTECHNOLOGY - Protocol.

#### 6.4 Use Case: Marissa Gets Money for Stanford by Tokenizing His Apartment

Marissa is an employee in an office of a multinational company. In order to make the next huge move in his career, he needs an MBA degree. He has just received an acceptance letter from Stanford Graduate School of Business and is happy as ever. He would not miss such an opportunity, but tuition fees at Stanford's MBA program are exorbitant. The first academic year alone is over 100,000. Marissa's initial plan was to cover part of the expenses by renting out his house with the remaining part financed by bank loans. Marissa's calculations show that the monthly interest payments are higher than the rental income. Another option is to sell his house, but that is the least desired scenario, since Marissa is emotionally attached to this property. TRANSTECHNOLOGY - allows Marissa to sell a fraction of his house, gain cash instantly, and at the same time continue to benefit from exposure to this income-producing property along with other investors. His house is tokenized through the TRANSTECHNOLOGY - Protocol and listed on the Platform. He can buy and sell any number of tokens depending on his current financial situation and cash flows. Also, the Protocol gives him the opportunity to buy back all the tokens.

#### 7. TRANSTECHNOLOGY - Protocol Is Based on Two-Layer Token Model

##### 7.1 RBT Tokens: Each Property in the Platform Will Have Its Own Property-Specific Token

RBT tokens are property-specific tokens, which are created when a new property is tokenized. Each property listed on the Platform has its own RBT, where PID stands for a unique property ID. The RBT token was engineered to be legal proof of real estate property ownership, and integrate with blockchain property rights registries as soon as the necessary technology and legislation are established. Each RBT simulates and represents the corresponding fractional ownership of the underlying property within the existing legal framework. The number of RBT created is equal to the area of the underlying property in square meters. One RBT represents an ownership share equal to  $1/(\text{the total number of RBT})$ . Each RBT token has its own smart contract, which is designed specifically for the jurisdiction of the property, and its type and purpose. An RBT token smart contract can include various provisions unique to each property, but there are 4 general functions of RBT tokens:

- An RBT token is a store of value: it provides the investor with exposure to the underlying property income (allows investor to participate in rent income), expenses and price changes
- An RBT token is an instrument for raising funds by sellers tokenizing their property
- RBT tokens allow a token holder or joint group of token holders who own 100% of the RBT to use the underlying property at their own discretion (for example, live there or work)
- RBT tokens give voting

rights on property-specific decisions through a special mechanism decentralizing property governance

Some RBT tokens have traits of securities, and TRANSTECHNOLOGY - will go through all the necessary licensing, registration or exemption procedures in the corresponding jurisdictions before any such tokens are sold or traded. Cash flows from income-generating properties and proceeds from the sale of property will be distributed through a smart contract as dividends, or through buyback tools to provide additional liquidity to the secondary market. Other RBT tokens will be pure utility tokens and will require no licensing (for example, timeshare and coworking space access tokens). Although the RBT token price is backed by the underlying property value, it can still fluctuate, and RBT token trading can be used to make a speculative profit. RBT tokens can be bought or sold on the TRANSTECHNOLOGY - Platform or any other exchange, or in peer-to-peer deals. All transaction costs are built into RBT token smart contracts and are paid exclusively with ALT tokens, irrespective of where RBT tokens are traded.

### 18 7.2 ALT Token Is a Means of Payment and a Store of Value within the Platform and the Fuel of the Protocol

The ALT token is a pure utility token used for several specific functions within the Platform. There are 3 major functions of ALT tokens:

- ALT token is the fuel of the Protocol and the Platform; all the fees (tokenization, transaction, management, etc.) are paid exclusively with ALT tokens
- ALT token is a means of payment and a store of value:
  - RBT tokens on the TRANSTECHNOLOGY - Platform can be purchased with ALT tokens
  - ALT token holders can earn extra income for work done within their roles assigned on the Platform paid with ALT tokens
- ALT tokens give voting rights on decisions through a special mechanism decentralizing Platform governance

ALT token holders can sell their ALT tokens outside the Platform. As the agreed ALT token price can fluctuate, we anticipate that ALT trading can be used to make a speculative profit. We emphasize that TRANSTECHNOLOGY - is not responsible for possible losses associated with such an unauthorized speculative use of ALT tokens. The core functionality of ALT tokens within the Platform is guaranteed unconditionally at the market price of ALT tokens. The ALT token supply is fixed: no new ALT tokens will be created after the initial crowdsale.

## 19 8. Tokenization Workflow Can Be Described in General but the Protocol Is Very Flexible and Will Change in Line With Legal Framework

### 8.1 Any Seller Can Tokenize Property With TRANSTECHNOLOGY -

Any real estate seller (individual or institution) can list property on the Platform. The listing process consists of the following steps:

- a seller registers with the Platform and passes all KYC, AML and other procedures
- the seller applies to list the property on the Platform
- preliminary analysis of the property
- appraisal
- expert committee approval
- due diligence procedures
- the qualifying property is assigned a unique property ID (PID)

### 8.2 The Protocol Is Developed in 2 Phases

#### 8.2.1 Phase One: Crowdfunding Business Model Is Used

Investment opportunities are detected through TRANSTECHNOLOGY - market research, and we will leverage the experience of our team and advisors. Procedures including analysis, appraisal, expert committee and due diligence are performed to confirm the investment decision. The first phase is the major source of the Platform's growth within the existing legal framework. For this phase, a proven crowdfunding business model is used:

- The seller lists a qualifying property for crowdsale
- Investors submit firm commitment orders and deposit funds to a special crowd wallet
- When the funding target is reached, TRANSTECHNOLOGY - Group sets up the legal ownership structure, including a Special Purpose Entity (SPE) to tokenize the property
- A fixed number of RBT\_{PID} tokens are issued: one token per square meter of the property
- The SPE purchases the property and

#### 8.2.2 Phase Two: TRANSTECHNOLOGY - Protocol Transformed Into Decentralized P2P Tokenized Real Estate Market

The second phase will be launched as soon as the necessary technology and legislation are developed, jurisdiction by jurisdiction. Sellers will be motivated to tokenize their property, even without the intention to sell it immediately, as any fraction of tokenized property can later be sold, inherited, gifted,

or otherwise distributed with minimal transaction costs. Decentralization elements will be tested and added to the Platform on a step-by-step basis. TRANSTECHNOLOGY - blockchain development, community growth, and ALT token holders' gradually increasing role in operations and governance are the foundation for the second phase.

### 8.3 TRANSTECHNOLOGY - Protocol is Based on Existing Legal Framework and Prepared for The Future

In Phase One, existing real estate crowdfunding and securitization models are intended to be used. In some jurisdictions, the nominee trust structure is the best available solution. A trust will hold the shares of SPV, which owns the property, for the benefit of RBT token holders. Beneficial rights will be protected by the nominee agreement. In this case, the RBT token itself will represent the proof of being party to such an agreement. In others, RBT tokens can represent the shares in SPV without any trust structure. This requires the legal possibility to keep shareholders registries and the writing of share transfers on the blockchain. For example, Delaware, which is sometimes called the "incorporation capital" of the USA, made it legal to maintain shareholder lists using blockchain technology.<sup>3</sup>

In Phase Two, RBT tokens are expected to be legal proof of ownership. At this stage no SPE structure will be needed. This can be implemented when blockchain technology will be adopted by the national laws on title registration.

21 3 DELAWARE STATE SENATE 149th GENERAL ASSEMBLY. Senate Bill 69

### 9. Technology stack of TRANSTECHNOLOGY - Protocol and Platform is Reliable and Flexible to Fit the Growing Market Requirements

#### 9.1 Platform Architecture is Based on Five Basic Logic Layers

Our team continues to research and test the best of the technologies available on the market. The description below reflects the current state of our vision and is subject to change based on future research. The Platform is based on the Command Query separation<sup>4</sup> technique (write and read requests performed separately) and is divided into five basic logic layers: the Distributed Storage Layer, the Ethereum Ledger Layer, the Access Layer

- The Blockchain Ledger is a customized version of the Ethereum blockchain ledger
- The Ethereum Virtual Machine (EVM)<sup>4</sup> is a decentralized Turing complete virtual machine that executes scripts. To mitigate spam and allocate resources on the network, EVM uses an internal transaction pricing mechanism called "Gas". Its price is expressed and paid in ALT
- The InterPlanetary File System (IPFS)<sup>5</sup> is a peer-to-peer network connecting remote servers in a single global decentralized storage platform. It is used to store all the documents connected with real estate properties, buyers, sellers and transactions. The IPFS system is scalable and allows for the storage of all documents in a decentralized manner. Documents stored in IPFS are strictly linked by the document hash to the corresponding blockchain transactions. This makes it possible to achieve distributed data integrity

The choice of technology stack (customized Ethereum and IPFS) is based on storage requirements and the rewarding mechanism (which is designed to reward node administrators, token holders and the Platform). The basic node structure consists of EVM and IPFS, which run in parallel. This makes it possible to achieve the proper motivation for node administrators and to provide all the necessary resources for running the Platform. The Ethereum Ledger Layer works on the Ethereum Blockchain and is used for two primary purposes:

- It anchors key information on transactions of RBT tokens on the internal blockchain
- It gives additional capabilities and liquidity to the ALT token

The Access Layer is a set of distributed Witness and Public Nodes that provides data from the Distributed Storage Layer and Ethereum Ledger Layer and receives Queries and manages Commands. Creating a Public Node as an additional access point to the information stored on the blockchain is not limited and is available to everyone. Creating a witness node that can produce blocks on internal blockchain and manage Alt tokens on the Ethereum network requires registration, submission request, approval by token holders, and the guarantee of constant node availability. The Interface Layer is the centralized service node providing the backend capabilities in the unified format of API to the Application Layer of

the Platform. This layer receives an input and generates two types of requests to the Access Layer: Commands (write requests) and Queries (read requests). The Applications Layer is a set of “Microservices” that run 24/7 and are maintained by the TRANSTECHNOLOGY - team. At later stages, this layer may perform as an application marketplace hosting functionality developed by third-party developers, and community and real estate market players.

### 9.2 DPOS is the Best Solution for the TRANSTECHNOLOGY - Blockchain Efficiency and Reward Distribution

The Distributed Storage Layer of the TRANSTECHNOLOGY - Platform is based on IPFS and the customized Ethereum Ledger, though with the following changes. Consensus is achieved via the Delegated Proof of Stake (DPOS) algorithm. This consensus model makes it possible to perform token holder approval and rights-delegation for the key actions on the blockchain, including block generation and resolving consensus issues in a fair way. The consensus mechanism is performed via a witness who certifies that the signature and timestamp of a transaction are valid and produce blocks. Anyone can submit a witness application. All applications are screened by the TRANSTECHNOLOGY - team and a list of witness is formulated. Token holders elect witnesses via a voting mechanism. Block Generation Reward. ALT token holders select witnesses in a continuous manner. Each time the elected witness produces a block, corresponding token holders receive a reward proportional to the token amount used to vote for the witness. See the formula below. where: TR is the token holder reward, TxFee is the transaction cost (Gas) in ALT tokens, WR is the witness node admin reward, TS is the token holder stake for the corresponding witness node admin, TWS is the total stake for the witness node admin from all the token holders. A witness is rewarded for each produced block in the amount defined by the token holder.

### 24 Smart Contract Deployment Process.

Any ALT token holder can upload smart contracts to the network. Such smart contracts are marked as “Under Development” until the contract validation process is passed. Quality assurance is initially performed by the TRANSTECHNOLOGY - team and includes a legal framework compatibility check, the Platform-architecture compatibility check and a security check. Anchoring. To increase the security, transparency and fault tolerance, the Platform periodically duplicates key information from the Storage and Ledger layer to the Ethereum network. This process is automatic and independent, and is not controlled by the witnesses.

### 9.3 The Initial Set of Applications is Designed for a “Get-Go” Start of Protocol Operations

The Distributed Storage Layer of the TRANSTECHNOLOGY - Platform is based on IPFS and the customized Ethereum Ledger, though with the following changes:

- The Property Marketplace is the live order book for every property listed on the Platform. Via this app, the user becomes familiar with property outlooks, costs, current statuses, locations, etc.
- The Seller Dashboard is a single endpoint for sellers that makes it possible to list and manage the property on the Platform and receive all of the relevant notifications and reporting
- The Investor Dashboard is a single endpoint for investors that facilitates managing owned properties, tracking all crypto and fiat transactions, and receiving all of the relevant notifications and reporting
- The Property Dashboard provides detailed information on the property and its current state, access to the property-related transaction history and all the relevant legal documentation
- The Cross-currency Payment System is an integrated set of payment tools (payment gateways, exchanges and other pay-in/pay-out systems) that provides a way to invest and sell properties in the currency of a user’s choice
- The Voting System is a smart-contracts-based subsystem allowing the ALT and RBT token holders to find consensus on the main protocol-related and property-related issues (Witness Nodes admin approval, property management, future platform development, witness pay, etc.)

## 26 10. TRANSTECHNOLOGY - Platform Provides User-Friendly Environment for the Initial Sale and Secondary Trading of Tokenized Properties

### 10.1 The Platform Consists of 6 Main Modules

The 6 Platform modules will be a seller dashboard, seller directory,

property directory, marketplace, investor dashboard, and role manager. Each new seller desiring to list his property on the Platform will be required to register. After registration and initial verification, he gains access to the personal seller dashboard. TRANSTECHNOLOGY - performs initial due diligence on the new seller and adds him to the seller directory. The seller's page displays all the public information about each seller. After the property is approved for listing, it is added to the property directory. The property directory is a well-structured database of all real estate objects listed on the platform. The marketplace, where investors submit their buy/sell orders, has a live order book for every property listed on the Platform. All properties are listed under two categories: primary and secondary market. Primary market objects move to the secondary market as soon as the crowdfunding process is successfully accomplished. The Platform runs 24/7, and executes transactions on matching bid/ask orders. The investor dashboard contains advanced features for investors, and is available for any qualifying and verified registered user. The investor dashboard is a personal portal where users can access all current and historical information about their activity on the Platform. The role manager is available to all ALT token holders. Each token holder can be assigned one or more roles in the Platform.

27 TRANSTECHNOLOGY - Platform Module 28

### 10.2 ALT Token Holders Will Be Assigned Roles in the Platform

Each user registering on the Platform will be asked if he or she desires to execute a particular role in the Platform. If the user owns some ALT tokens and has not selected a role, he will be assigned the basic role of promoter. Other roles will include affiliate, analyst, appraiser, broker, notary, property manager, registrar, etc. A full list of roles will be available on the Platform website. Some of the roles require special skills, certificates or licenses, and will require uploading additional documents to qualify. All members of the community will have the opportunity to earn part of the fees paid for the use of the Protocol or the Platform with ALT tokens as a percentage or a fixed amount. The work offered can include attracting new investors, market analysis, property appraisal, etc. The growth of the community and participation in the Platform workflow lay the foundation for its future decentralization and self-regulation.

### 10.3 ALT Token Holders Will Take Part in Platform Governance

ALT token holders are involved in the decision-making process regarding real estate listed on the Platform, selection of third party vendors, and other strategic decisions of TRANSTECHNOLOGY - development. ALT token holders will have the opportunity to address any issue in the voting system. A vote will be held at least once a year. The results of this vote will be submitted to the TRANSTECHNOLOGY - management. Voting results won't be binding, but they are to be strongly considered in decision making.