



# polybius

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## POLYBIUS PROSPECTUS

A Project of a Regulated Bank for the Digital Generation

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## Introduction

Digitalization of our daily lives is now an undisputed phenomenon, which is here to stay. According to studies made in 2015 and 2016, over 80% of developed countries' population have some access to the Internet. Furthermore, over 60% of European citizens own a smartphone. It implies them being near constantly online.

With the world getting more connected, an increasing number of companies strive to offer their services and solutions online. Finance, education, healthcare, commerce and leisure providers are actively moving towards digitization in an attempt to serve the existing and find new customers worldwide.

European Parliament, along with other regulatory authorities across the globe are now actively outlining new rules and principles for e-services. The legal framework removes regulatory uncertainty serving as a catalyst for the business migration online. We've undertaken a thorough analysis of the latest trends including rules around eID, QES and Trustee services as well as the Aggregation of Payment Services within the scope of the PSD2. And this is where *Polybius* steps in.

*Polybius Foundation*, a team of financial, security, legal and technical experts is raising funds for its project *Polybius Bank*. Our goal is to capitalize on the broader digitalization trend with a particular focus on:

- 1.** Financial services which is at the core of all business interactions;
- 2.** Digital ID and wallet concepts needed to serve as gateway to the eCommerce market.

With the success of the ICO, *Polybius Bank* will become a fully digital bank accessible everywhere at any time. It will have all the functions of a classical bank, but will not host any branches nor physical front-offices and will rely fully on the latest digital technologies.

This will enable *Polybius Bank* to be among the least expensive banks to operate in the world, with a very efficient cost/revenue ratio and granting its backers with higher returns.

The *Polybius Bank* project is aimed to establish an online scalable financial infrastructure for businesses and individuals, provide electronic identity and trustee services across the EU, and create a user authentication and payment processing gateway for not only online merchants, but also commercial, corporate and governmental services.

This prospectus covers business, technical and regulatory details of the project, our step-by-step milestone plan and the technologies which will be developed as the basis of *Polybius* infrastructure.

The tokens have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), and may not be offered or sold in the United States or to or for the benefit of US persons (as defined in Regulation S under the Securities Act) unless they are so registered, or an exemption from the registration requirements of the Securities Act is available. One such exemption allows the resale of tokens purchased for their own account and for investment purposes only by investors who (i) are not otherwise affiliated with the Polybius Foundation, (ii) have been exposed for some time to the economic risks that ownership of tokens entails, and (iii) are not part of the distribution of the tokens.



## What is Polybius?



While starting off as primarily a financial institution, the *Polybius* project is meant to grow into your daily servicer and companion ecosystem. It will aim to enable secure and seamless connections between life and the things we love and use every day.

The key elements of *Polybius* ecosystem are the *Polybius Foundation* and the *Digital Pass*.

*Polybius Foundation* is the subject fostering the *Polybius Bank* or *Polybius Payment Institution* (P.I.) at the start. Its customers will not only get access to a variety of financial services, but will likely be among the first to get the *PolyID* that will plug them into the *Digital Pass* environment.

*Digital Pass* is an independent environment as a service, which will serve as a storage for encrypted individual information. The security of access to the information will be enabled by SSL certificates, dynamic PINs and, to some extent, by biometrical data. The security will be compliant with the PSD2 RTS requirements issued by the EBA Authority on 23.02.2017.

Among other planned features are scoring and sensitivity systems for credit and insurance businesses, asset and currency trading systems, seed & VC investment tools, eID and Trust services and other features described in this Prospectus.

*Polybius* is being designed as a highly scalable platform targeted at simplifying our daily lives.



*PolyID* prototype

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## ICO structure



The *Polybius Foundation* is raising funds to support the establishment of the *Polybius Bank* or the *Polybius Payment Institution* and to deliver the respective technologies. For that reason, *Polybius Foundation* is issuing *Polybius Tokens* (PLBT) through the smart contract system operated by *Ethereum* (ref to Annex 1). The funds raised by the sale of tokens will be retained by the *Polybius Foundation* until they will be used.

*Polybius Foundation* is a public registered body with legal responsibilities and is subject to audits. This will ensure the transparency of operations and the secure custody of the funds.



*Polybius Token symbol*

**Token name:** PLBT Token - Polybius Profit-Share Smart Contract

A *Polybius Token* represents the right to receive a part of distributable profits of *Polybius P.I.* or *Polybius Bank*. All tokens in aggregate will have the right to receive 20% of such profits. The Tokens will be assigned pro-rata to the funds provided to the *Polybius Foundation* during the ICO.

### **Payout Structure:**

According to the Bylaws, at the end of a financial year, 20%<sup>1</sup> of distributable profit of *Polybius Payment Institution* or *Polybius Bank* is transferred to the specific Ethereum (ETH) wallet. The ETH is then redistributed to all holders of *Polybius* tokens according to smart contract conditions (i.e. the stake of profit is received pro-rata the share of tokens owned).

### **Token supply:**

The total supply is not locked, as we will need to be able to add tokens before the end of sale and revoke the unsold amount.

### **Initial Rate:**

Price per token is locked on 10 USD per 1 Token.

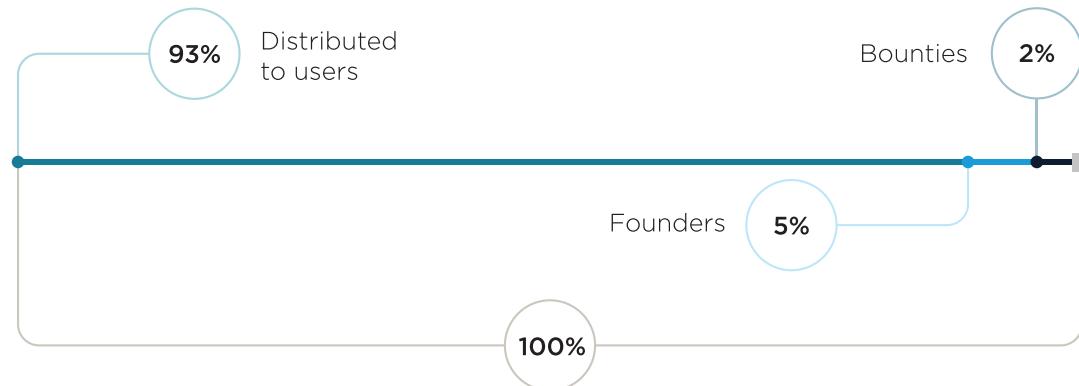
<sup>1</sup>May be adjusted in accordance with clause 18 Round A Conversion as outlined in the Terms and Conditions

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## ICO structure



### Token Distribution



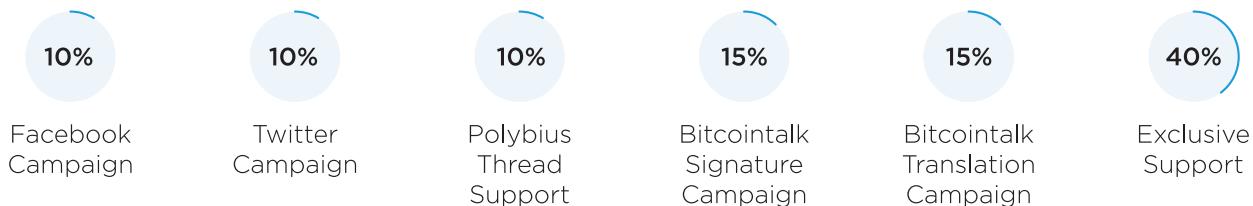
### Bonuses

Extra tokens added to a purchase.



### Bounties

Bounties percentage: x% out of the bounty pool.



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## ICO structure



### Token Distribution:

- Distributed to users - 93%;
- Founders - 5%;
- Bounties - 2%.

### Bonuses:

- Day 1 – 25% token bonus;
- Day 2-7 – 20% token bonus;
- Week 2 – 15% token bonus;
- Week 3 – 10% token bonus;
- Week 4 – 5% token bonus;
- Week 5 – 0% token bonus.

### Bounties:

- Facebook campaign – 10.00% of bounty pool;
- Twitter campaign – 10.00% of bounty pool;
- Bitcointalk signature campaign – 15.00% of bounty pool;
- Polybius thread support – 10.00% of bounty pool;
- Bitcointalk translation campaign – 15.00% of bounty pool;
- Exclusive support – 40.00% of bounty pool.

Bounties are provided after the crowdsale ends. At the end of the crowdsale all sold tokens are considered to be 93% of the total supply. The remaining 7% are then distributed among founders and bounties receivers according to the information above.

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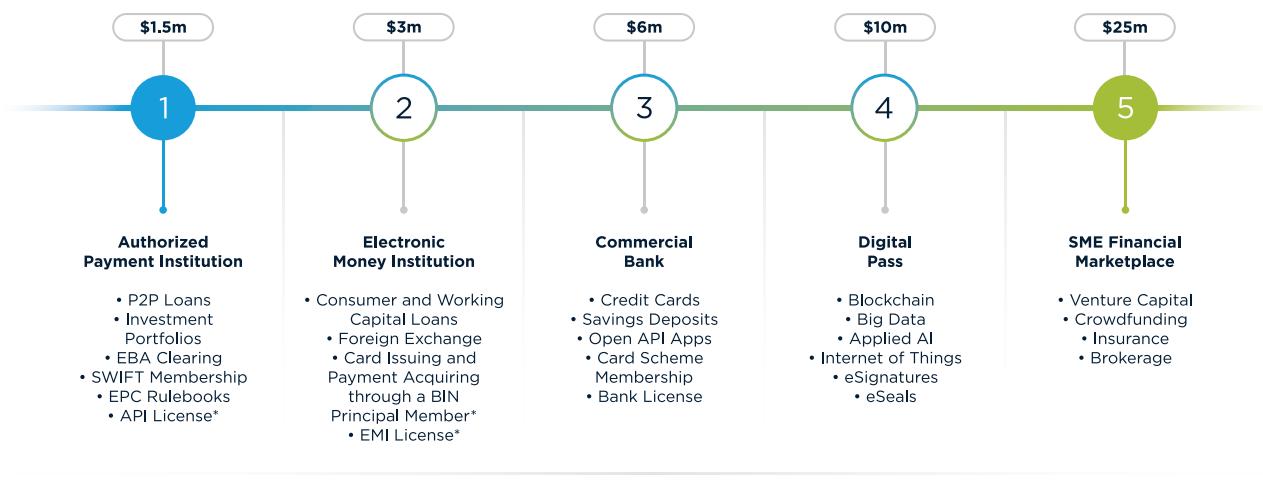
# Milestone Plan

## Polybius Milestone Plan

The road to creating a bank involves many different aspects, such as licenses, compliances, technologies, consortia and creativity.

Below you can see the milestone roadmap that covers the most significant levels of financial activity that we will be achieving with our ICO. Every step milestone is meant to be incremental to the preceding one and to be implemented according to the market response to the proposals.

ICO proceeds are intended to be spent mainly, but not exclusively on acquisition of licenses, building out the systems, hiring the team and marketing.



At *Polybius Bank or P.I.*, we will rely on a set of public and private licenses instrumental to comply with many regulations, existing in the financial field. Among them are the public EMI and banking licenses, the participation in Card Schemes, the creation of regulation-compliant identification mechanisms and other technical conditions to meet.

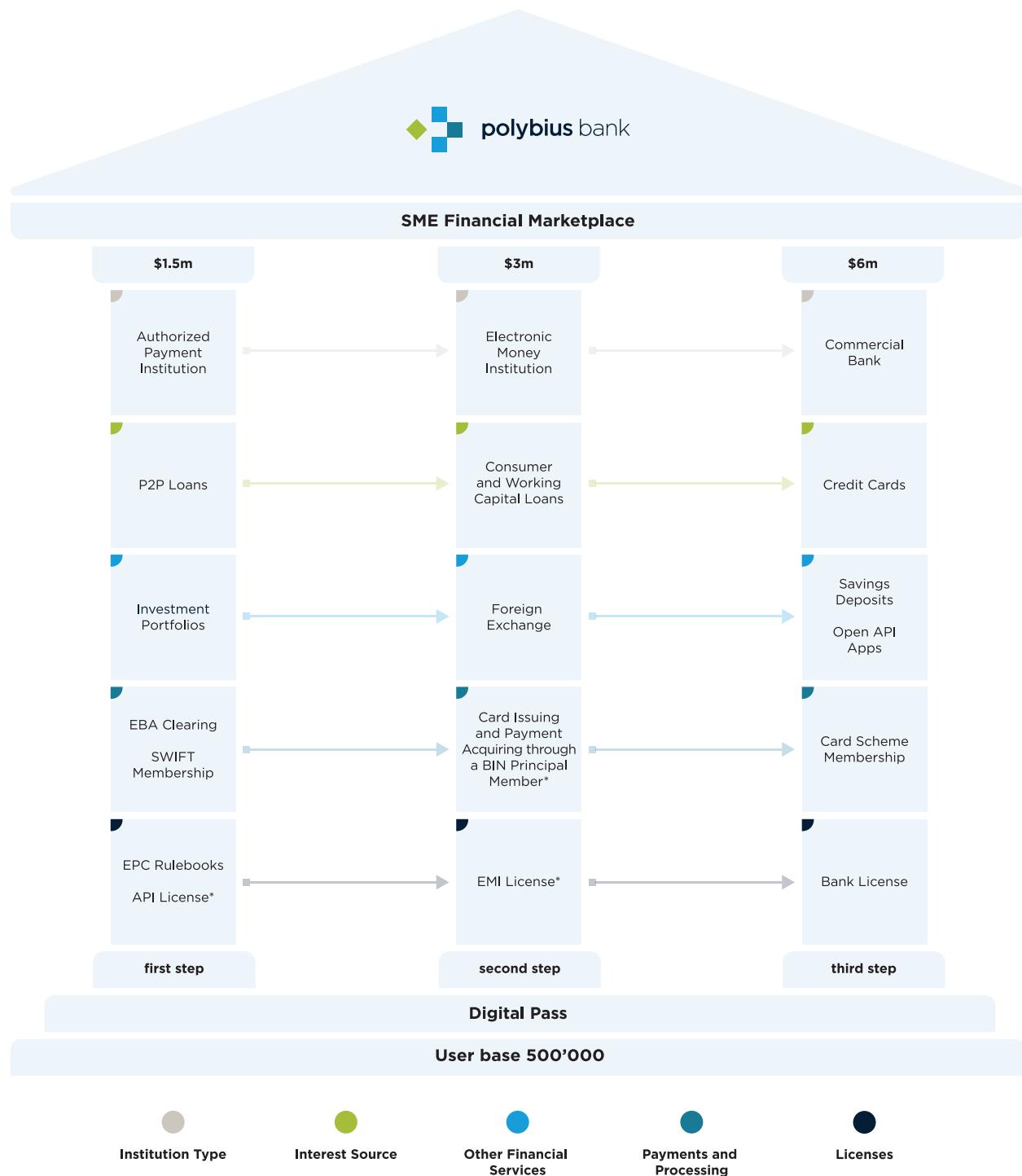
Every milestone step is an advancement to a broader set of services at *Polybius* customers' disposal. While our in-house *Digital Pass* service and technology will serve as a platform at the core of the *Polybius Bank or P.I.*, other features may be developed independently. During this process, the ecosystem will be formed and *Digital Pass* will start its primary day-to-day operations.

As for the customer base, *Polybius* strategic partners will provide an initial base of users for the *Polybius Bank or P.I.* disposal. We expect access to ca. 500'000 users at inception. This will give us a strong base for growth and a quicker path to building revenues and to profitability.

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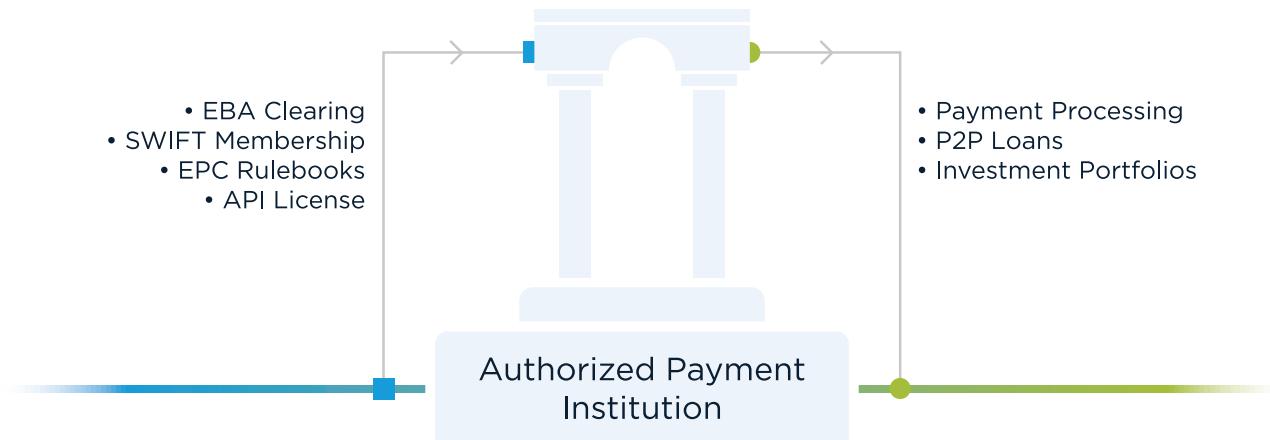
# Incremental Structure

## Polybius Bank and Payment Institution Incremental Structure



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## Authorized Payment Institution



During the initial step for a viable Polybius operation, a set of conditions needs to be met. Among the minimal requirements are licenses (small Electronic Money Institution (**sEMI**) or Payment Institution (**P.I.**) licenses) and mechanisms to comply with the law and financial regulations (such as Know Your Customer (KYC), Anti Money Laundering (AML), Combating Financing of Terrorism (CFT), etc).

At this step, instead of the sEMI license, we, at Polybius, aim to apply for a license for the Polybius **Authorized Payment Institution (A.P.I.)** for the sake of lowering the initial investment requirement. A.P.I. license is required to store clients' money and organize payment processes. The time required to acquire the license is 3-9 months.

At this milestone, *Polybius Payment Institution*, or Polybius A.P.I., will be legally considered a non-banking financial institution (NBFI-ND) and will not take deposits until acquisition of the banking license.

**SWIFT membership** is also required as one of the key elements for banking procedures. Joining the SWIFT network enables a bank to receive a Business Identifier Code (BIC), and to be able to communicate with other financial organizations via SWIFT messages for electronic money transactions. It may take up to 3 months for the application to pass through.

*Polybius Payment Institution* will adhere to the **EPC Rulebooks** to use them in the European payment and messaging network for the Euro zone. The EPC Rulebooks define principles of money transfer in Euro according to the European Union Regulatory Framework. The time required to join and to operate the EPC Rulebook network is expected to be 6 months.

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**Compliance** with specific rules, laws and regulations is of utter importance in banking environment. A banking institution is obliged to set and follow high standards of operations in order to protect its stakeholders. Besides that, the reputation of a bank can also be severely damaged by poor processes including KYC and AML/CFT techniques and software. We will use existing tested technologies to comply with the standards and the requirements.

In KYC, for example, modern banks are still playing by old rules due to the sensitive nature of the procedure importance. Up until now, most KYC and AML procedures require front-office presence of a customer. While automatic biometric devices still have to prove their acceptability, efficiency and security in fully digital banking, players like SEB are evaluating options of using Skype for customer verification.

**P2P loans** are a new model in credit systems, which allow organizations to establish a platform that links those looking for loans with those looking for small investments and profit. Such systems are a great way for financial institutions that match the lenders with the borrowers to generate a capital-efficient, credit risk free revenue stream on processing (e.g. platform maintenance, customer due diligence, scoring). We see a particular opportunity in cross-border P2P lending while most of today's platforms are locked into a single jurisdiction.

*According to researches done by Deloitte, the Compound Average Growth Rate (CAGR) of the market is over 104% in the period from 2011 to 2015, with almost double the growth during the period from 2014 to 2015. Studies also suggest that by 2021 the total P2P loan market will be over \$500 billion, with European marking being over \$35 billion.*

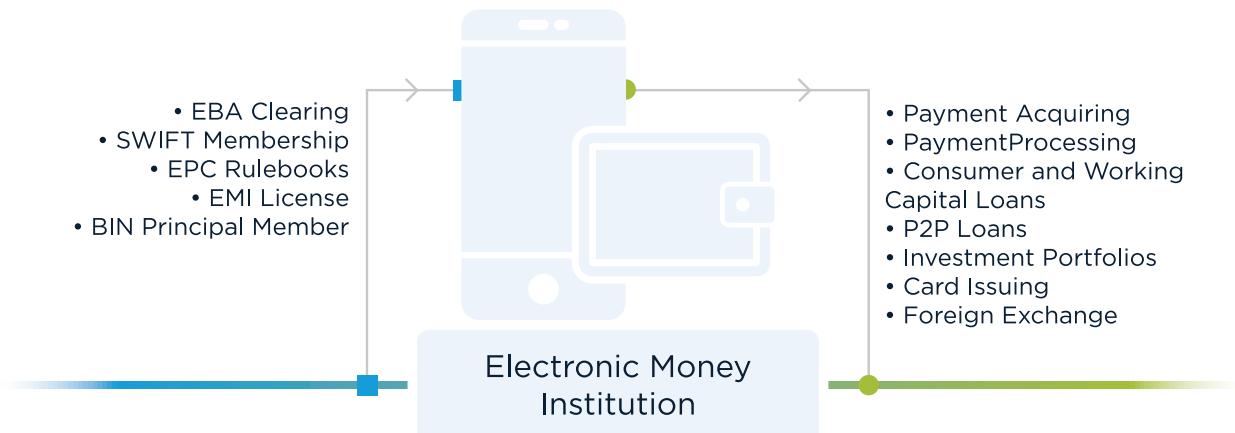
*However, as all traction is to be created by customers, Polybius aims to set high standards to ensure the security of the procedure and comfort of all parties involved. This means that our P2P loan platform may also adopt scoring and convenient authentication mechanisms to make the bid/offer phase transparent and trustworthy, as well as being competitive and compliant with the regulations.*

**Investment features** for *Polybius Payment Institution* customers will include creating investment portfolios, managed by a *Polybius* strategic partner company.

The portfolios are meant to be an investment product with a customizable risk/liquidity profiles. The role of *Polybius P.I.* will likely be limited to a referral and funds transfer payment agent to the said strategic partner.

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## Electronic Money Institution



Upon reaching our second milestone, *Polybius* will be eligible to qualify for a broader range of instruments that will increase the financial services offered reaching more sophisticated and functional banking. At this stage, *Polybius* complete **Electronic Money Institution (EMI)** license will allow us to issue electronic money – something we would not be able to do with a limited P.I. license.

*According to the article 2.2 from directive 2009/110/EC of the European Parliament and Council, “electronic money” means “electronically, including magnetically, stored monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions [...], and which is accepted by a natural or legal person other than the electronic money issuer”.*

In XIX century, gold was used as money. In XX century, we moved on to cash for both historical and practical reasons. In XXI, money went digital, and it was rare to meet a person with a bank account not holding a debit card. For a bank to have the right to **issue cards**, it must either apply for a card scheme membership (like MasterCard, Visa or American Express), or join an already existing member of a scheme, namely BIN Principal Member A BIN Principal Member will issue the cards for Polybius and will be communicating with schemes on our behalf, taking fees for processing. Not only do bank clients need to send money, but they also need to receive it, whether to their personal or corporate accounts. A BIN Principal Member is also responsible for money **acquiring**, creating a seamless both-end payment transaction service. It may be required to have a “prefunding account” on the side of a BIN Principal Member and it might take up to 6 months for negotiations and final agreement.

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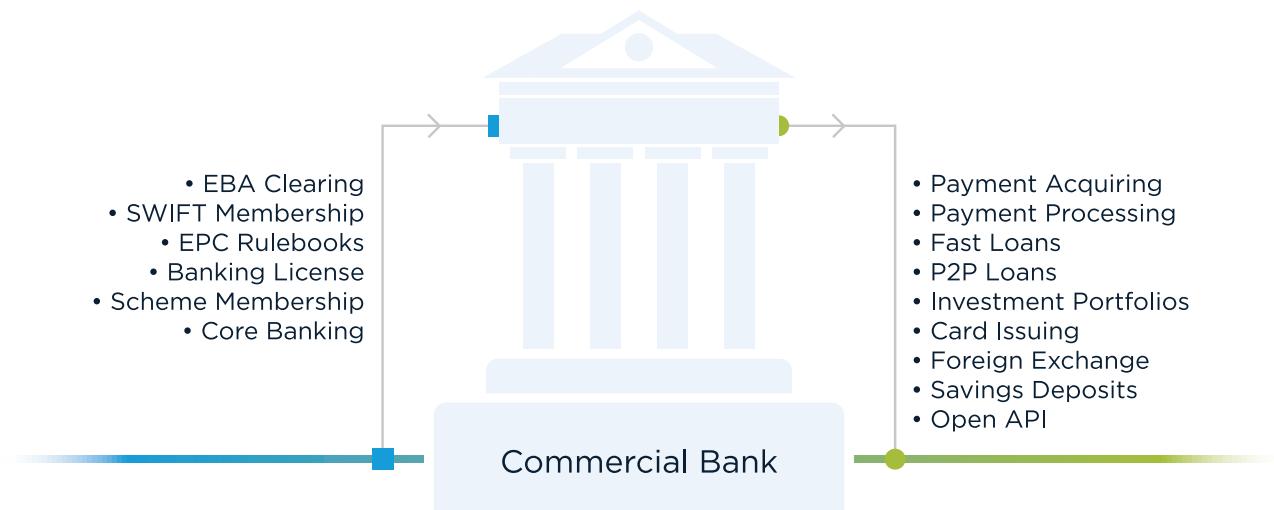
At this milestone, *Polybius Payment Institution* will likely implement **currency exchange** services, allowing corporate customers to keep a variety of currencies inside a single bank account, exchanging them at their discretion and making payments with less spending and volatility risks. The deployment of the exchange may take up to 3 months.

By being in the middle of an online financial transaction we expect to gather a lot of insight into consumer's behavioural pattern as well as income and liability profile. This will drive our scoring models allowing to offer **loans**. We expect these loans to be extended predominantly to finance purchases from online merchants we'll be working with. This will enhance the value of the membership of *Polybius–Digital Pass* biosphere through driving the sales for our merchants and providing a differentiated offering for the consumers. Last but not least, it will also be beneficial to *Polybius* as we will maximize our return on investment by supplementing interest income with the consequential transaction revenues.

Similarly to our consumers, we would like to be in a position to offer financing to our merchants. This will most likely take the shape of working capital financing whereby we could either (a) finance their stock or (b) allow them to provide consumer financing by extending them a loan to bridge a receivable. Particularly in the case of receivable financing, our deal appetite will likely be driven by the credit scoring as well as the merchant's trade volume through *Polybius*. Such positive reinforcement will encourage the transactions through our platform and drive value for all *Polybius* stakeholders.

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## Commercial Bank



The strategy upon reaching this milestone greatly advances, and so do Polybius ambitions and requirements. At this stage, Polybius will be eligible to reach the potential of a fully functional bank with a complete set of features. Along with classical banking services, Polybius Bank will deliver applications and instruments required in the market. Our aim is to provide Banking as a Service, more commonly known as **BaaS**.

But before the development of APIs, Polybius may apply for a **card scheme** (Visa/MasterCard) Principal Member License. With such membership, no BIN sponsors would be required for card issuing, simplifying the card payment processing and reducing the costs. The licenses allow card issuing in all European countries. It may take up to 6 months to receive the membership.

At the same time, Polybius will rally to become a bank, applying for an all-inclusive **banking license**. This is one of the most serious licenses and requires Polybius to undergo many lengthy audit sessions. The process may take up to 2 years, but as a result Polybius will be authorized to provide **deposit** services, issue debit and **credit cards** and offer savings accounts (e.g. retirement savings).

The digitalization of commerce is the ultimate requirement for modern merchants to stay competitive across the market. This, however, makes the merchants dependent on third party payment service providers to issue the services and the infrastructure for payment initiation and account information services. The offering of a classical bank is often regarded as limited and inflexible. We therefore see a significant opportunity to gain strong market share across electronic merchants by offering a nimble solution.

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## Commercial Bank



With the PSD2 in place, banks will have to adapt and offer just the specific services required for e-Commerce, as well as provide tools for TPPs which will come with help of new directives. The mission of *Polybius Bank* is to not only provide the Account Servicing Payment Service Provider (ASPSP) services on an open platform for merchants, but to also make sure that the implementation and integration of such services comes seamlessly through the role of *Polybius* as a TPP, i.e. Account Information Service Provider (AISP) and Payment Initiation Service Provider (PISP) platforms in the frame of the PSD2.

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The infrastructure of *Polybius Bank* project will rely on reputable existing core solutions along with technologies meant to digitize and automate operations and communication.

*Digital Pass*, the product of our development, is a standalone technology and service aimed to standardize system-to-system communication, and enable trust through the integrity of records. It is designed to facilitate individuals and businesses to get access to, and to keep encrypted personal & corporate data in a privately accessible decentralized ledger. The data will later be used in a secure, open and non-discriminatory manner to increase the scope of *Polybius Bank* or *P.I.* procedures, as well as to build an ecosystem for businesses in strict accordance to regulations issued by the European Parliament and outlined by the European Commission.

*Digital Pass* employs the experience of the trusted and field-tested Estonian e-Residency identification system and its uses. The main principles of security, adaptation and potential appliance are outlined below:

### Protection of personal data

The first and most important aspect of *Digital Pass* features is related to the processing and storage of data referable to the personal identification (sensitive), as well as anonymous and pseudonymous information. The classification, storage, analysis, processing and accessibility of data will be compliant to the directives set by European Commission, i.e. the General Data Protection Regulation (GDPR) and others.

### Decentralised Ledger Technologies

Due to the critical importance of information security, the data requires an undeniable, highly secure and redundant storage environment that will also allow private access to and exchange of information between *Polybius Bank* or *P.I.*, its customers, trusted entities and law organisations. Being compliant with the European Union directives and regulations, *Emer* blockchain technology will be adopted as a basis for further development. Among its key features, *Emer* offers multi-level permission-based access to data via SSL certificates. Entities and organizations using the trusted environment may include, but are not limited to: financial, health and government institutions along with trust-businesses. The access to data entered and retained in the trusted environment will be provided on the individual's discretion or by a request from legal authorities.

While the *Emer* blockchain stays as a trustable environment for data storage and access to services and entries is covered by independent software solutions (such as the Authorizer), there are other DLTs (such as the Tangle) that are designed to allow an efficient transfer of low batches of data. This is a tool useful in processing data generated or required by small IoT devices.

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## Internet of Things

With the expansion of smart devices, smart cars and smart houses, more types of transactions will eventually appear. For the IoT to function seamlessly, specific standards of micropayment processing and message delivery have to be adopted for convenient M2M communications and billing.

While not being a focus area at the earliest stages of development, the potential and the requirements of the field is the reason to keep it in mind. As the technology starts to gain mass recognition and adoption, *Polybius Bank* or *P.I.* will look forward to develop and provide instrumental payment services based, or employing currently existing solutions.

## Big Data

*Digital Pass* is designed to collect and store a handful of data, which will be used to enable individuals and entities to receive both high quality services and information about the Market in general. The information may be anonymously collected by trusted, licensed and regulated entities and then processed, providing regional data regarding the requirements of local industry. The data may also be used for the development of new procedures or services required in different areas of human life. Due to the sensitive nature of the data stored in *Digital Pass*, such analysis will be done in the strictest regulatory confidence and in full compliance with European regulations.

## Applied AI

Although in its infancy, artificial intelligence is already used as a tool of data analysis. Weak AI or Narrow AI is complex combination of algorithms able to analyze big clusters of data and give "answers" accordingly to preset logic. In financial environment, such tool is used in scoring and sensitivity systems. To remove any chance of private selfishness in the processing of sensitive information, and to increase trust between customers, trusted entities and *Digital Pass*, it is crucial to ensure the correct usage of data. Along with the development of *Polybius Bank* or *P.I.* and related services, the overall capacity, operational speed and costs will be improved with the implementation of applied AI solutions within the *Digital Pass* and other functional features.

## For backers and *Polybius Bank*

The real value of *Digital Pass* lies not only within its design principles, but also within the scope of recent regulations set forth in the European Union to advance the European Single Market.

By following the latest regulations, financial institutions and merchants will require secure digital identification, authentication and authorization tools to provide their customers an entry point in the Digital Single Market.

*Digital Pass* is the solution to satisfy compliance with the eIDAS Regulation and may generate revenue on its related services, e.g. data processing and analysis. Our initial goal is to create a single cross-European credit scoring system together with our strategic partners who are among the leaders in the credit industry in Europe. Those entities interested in using the features and tools provided by *Digital Pass* will be subject to royalty and maintenance fees as to ensure the validity and continuity of the service as well as profitability.

The tokens have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), and may not be offered or sold in the United States or to or for the benefit of US persons (as defined in Regulation S under the Securities Act) unless they are so registered, or an exemption from the registration requirements of the Securities Act is available. One such exemption allows the resale of tokens purchased for their own account and for investment purposes only by investors who (i) are not otherwise affiliated with the Polybius Foundation, (ii) have been exposed for some time to the economic risks that ownership of tokens entails, and (iii) are not part of the distribution of the tokens.



## Basic technical principles of operation:

*Digital Pass* combines user SSL certificates, blockchain-based infocards and a widely acceptable OAuth2 technology. Current methodology of registration is the following:

1. User creates an infocard with private information (name, address, contact details), encrypts it and sends it over to the ledger;
2. User generates a SSL certificate including the infocard data, sends the info to ledger and adds the \*.p12 file to the browser;
3. User authorizes on the *Digital Pass* website using a certificate in the dashboard. User can also use other means of authorization such as an ID card, a bank or a governmental services website. If the infocard data corresponds to data from other sources, the user is considered valid. In any other case the data is verified by a moderator. This is a way to connect a user certificate with real user data;
4. Implementation of *Digital Pass* into websites (banks, exchanges, merchants, etc) is done via the standard OAuth2 protocol.

*An illustrative use case example for a credit organization (CO):*

1. User presses "authorize via Digital Pass" on a CO website;
2. The CO website redirects the user to Digital Pass website, where it authorizes using own SSL certificate, receiving a User Authorization Token;
3. By a following Digital Pass request, a CO website receives user's infocard data along with verification data, for example:  
`{verified=true;verified_type:id_card}`
4. Next, a CO provides a loan to a user, informing Digital Pass without disclosing any of the user's PII.
5. *Digital Pass* publishes a blockchain entry with such parameters as:

```
name:      credit_info:SSL-id
value:     credit_org      =      "Credit Organisation Name"
           credit_summ =      "Loan amount"
           credit_expiration = "Loan expiration date"
```

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### Small and Medium Enterprise Financial Marketplace

The *Financial Marketplace* will be the environment for fintech companies and financial experts to present and provide the services and technologies as the product of their expertise and development. There is a reason for such solutions to be in high demand - many small and medium enterprises often require additional tools for their business to be successful and convenient, and the market will be especially ready for such tools in the scope of the PSD2. Venture capital, seed and angel investors also require platforms for their daily operations, so with the development of the *Digital Pass* analysis & scoring technologies accompanied by fintech solutions we foresee the employment of such platforms and instruments in the marketplace as well.

The tools will vary by purpose and mechanics, ranging from traditional single market analysis instruments to cutting-edge financial aggregation platforms for loan, brokerage, insurance and investment needs.

e-Commerce & m-Commerce services along with online merchants have to rely on third party processors to cover their money remittance, compliance or logistics requirements. *Polybius Financial Marketplace* will be designed to connect the developers and the consumers of such technologies.

Decentralized Autonomous Organisations or DAOs can be considered a new tool for Venture Capital investors as it provides secure funding mechanics using smart DLT contracts.

Same mechanisms of smart contracts and DAO tokens can also be employed in development of smart crowdfunding platforms. The Initial Coin Offering (ICO) itself is an example of a tool for the *Polybius Financial Marketplace*.

With data collected in *Digital Pass* and analysed by third party scoring and sensitivity systems, the marketplace will attract insurance companies, credit agencies and those willing to provide access to their information. We believe that companies working with financial risks would benefit from having a greater data input and therefore a better analytical output due to higher scoring precision. For the customers, it will mean that such services will be able to provide lower-than-usual prices for services to compliment the readiness of individuals to share their data and ensure the financial and operational safety.

Foreign exchange can be more than just a tool for international money remittance – it can become a trading platform. Corporate and individual brokers will be able to provide their services or technologies within the marketplace, while big and medium investors will access the database of startups and established companies in need of venture capital.

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## Core Team



The Polybius project is driven by a number of expert groups of with common vision. Below is a list of the core day-to-day team at this stage. These are actively involved in the key strategic decisions, project planning and development. The team is regularly drawing on the expertise of the deep bench of the advisors affiliated with the project.

Additional tech and finance professionals have committed to join the project upon ICO closing. They are not yet actively involved nor listed below due to their arrangements with current employers and conflicts of interest.



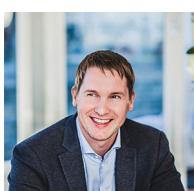
### Sergei Potapenko

Polybius' vision and inspiration

*CEO and co-founder, HashCoins OÜ*

Sergei is a seasoned executive with a rich team building and leadership experience. Out of his 11 year work experience, he had spent 4 working with Blockchain technologies and over 7 years in managing positions across several international trading enterprises. With main focus on engineering and business administration, Sergei has a deep perception and understanding of the directions of modern technological development and capabilities.

Sergei is a pragmatic professional driving the project execution, making the Polybius vision a reality.



### Ivan Zahharenko, MBA

Polybius' financial products

*Independent financial advisor*

Ivan has 10 years of finance industry experience, having worked with both corporate and private clients within Swedbank and Citadelbank. He has held the positions of Corporate Business Development Director at Expobank AS, Senior Private Banker at Baltikums Banks and Private banker at Parex Bank. Ivan excels in partner relations and also holds an MBA in economics. His clients have praised him for his ability to make quick and rational decisions, prioritising on the delivery.



### Ivan Turygin

Polybius Business Development

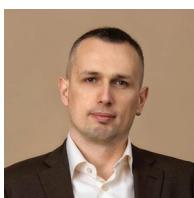
*Chairman of the Board, HashCoins OÜ*

With a decade of international entrepreneurship experience and several successful businesses across the EU, Ivan is responsible for continual activities of the companies and its projects. He studied Manufacturing Technology and Finance, Banking & Business Administration at the Tallinn University of Technology. This ultimately led him to investing in Tech projects, among which is HashFlare and Polybius.

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## Core Team



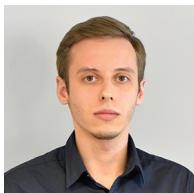
**Nikolay Pavlovskiy**  
Polybius Technology  
*CTO, HashCoins OÜ*

Nikolay is a physicist by background. He had spent the first five years of his professional career working at “Fakel” construction bureau in Kaliningrad as a research engineer. He relocated to Estonia in 2010 and joined HashCoins in 2014. Aside from his CTO responsibilities at HashCoins, he is one of the drivers behind Emercoin advancement team.



**Vitali Pavlov**  
Polybius DigitalPass Lead  
*Chief Product Officer, HashCoins OÜ*

Vitali has a background in cybernetics and computing, holding a masters degree from Tallinn Technical University. He's held a variety of positions in tech companies, most recently the CEO of DonateIT before joining HashCoins. Vitali is also one of the founding members of The Estonian Cryptocurrency Union, a non-profit organization focusing on popularizing cryptocurrency and related technology.



**Edgar Bers**  
Polybius Communication  
*Product Development & Communications, HashCoins OÜ*

Edgar's educational background spans across linguistics and psychology. His most recent professional background, before joining HashCoins, was in Distribution Management at Top Connect, telecom solution provider. Edgar is an avid blockchain and cryptocurrency enthusiast, he has presented at a numerous technological conferences and other public forums.

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Due to the sensitive nature of banking business and PII processing, here is the (indicative, non-exhaustive) list of standards, regulations and legislations we will to comply with:

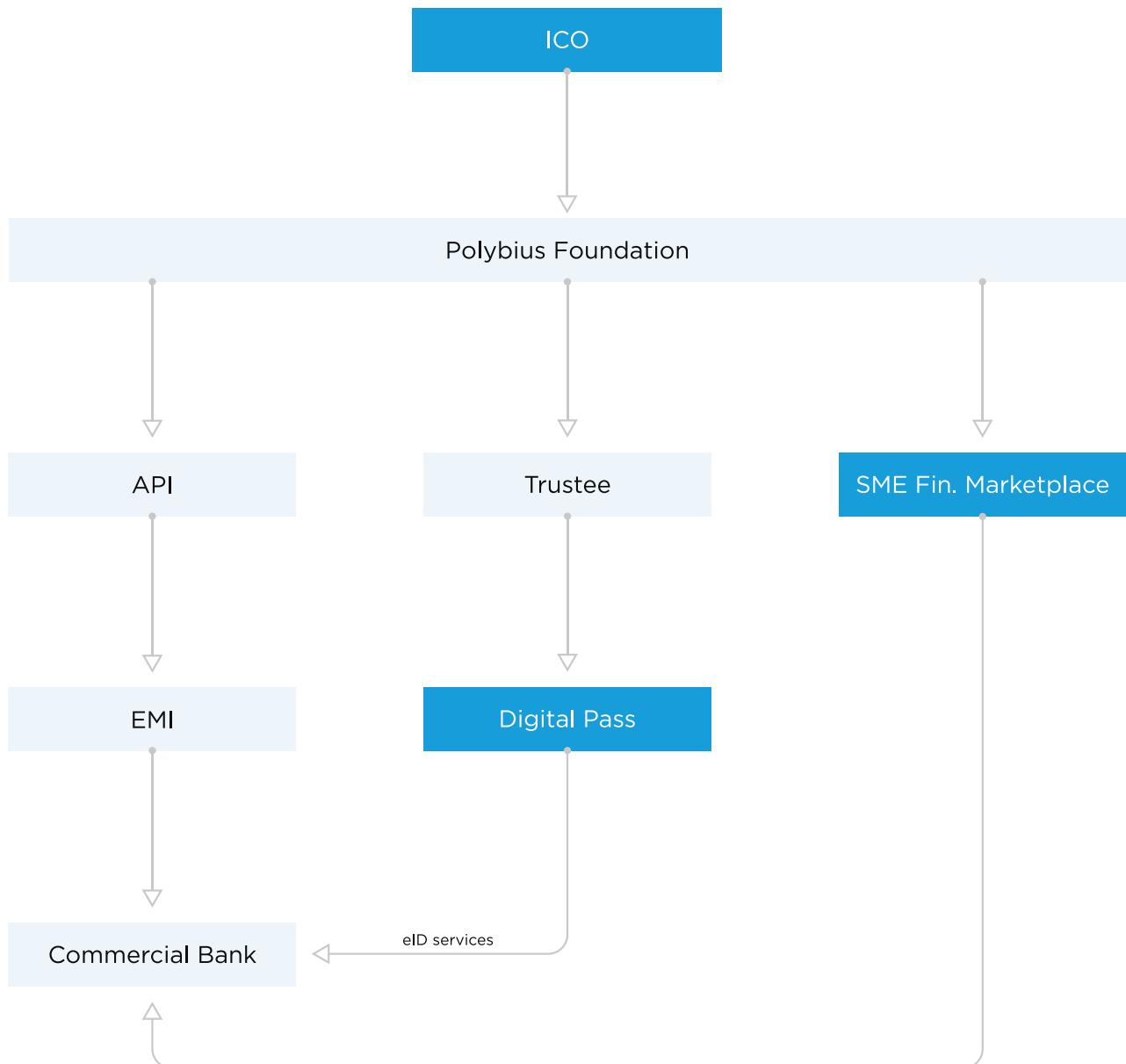
- 1. ISO/IEC 27000 family of standards** – defines requirements for PII storage, processing and distribution. More details can be found on the [official website](#) of the organisation;
- 2. GDPR** – the General Data Processing Regulation specifies the core principles of working with the PII. The full description of the directive can be found on the [official website](#), while a shorter version can be reviewed [here](#). The most recent publication by the European Commission can be found [here](#);
- 3. eIDAS** – a set of standards for eID and Trust Services for electronic transactions in the European Single Market. The information regarding specifications are published on the [official website](#) of the European Commission;
- 4. ISO 20022** – a standard of communication and messaging between financial entities. Its purpose is to reduce "misunderstanding" in general terms by creating a unified dictionary for businesses. For more information, visit the [official website](#) of SWIFT or the [official website](#) of the ISO itself;
- 5. PSD 1 & PSD 2** – the directives that are set by the European Commission to regulate payment services within the European Union. These directives, among other things, are meant to improve security and customer protection and can be viewed in greater detail on the [official website](#) of the European Commission;
- 6. SEPA regulations** – meant to set an outline of rules and conditions for cashless payment within the EU, has its legal basis outlined in PSD 1. More information can be reviewed on the [official website](#);
- 7. AML/CFT legislation** – a list of principles meant for Anti-Money Laundering and Countering the Financing of Terrorism. More information about specific regulations is available [here](#) and [here](#), while other information can be found on the [official website](#) of the European Banking Authority.

It is also important to keep in mind that most directives are applicable for the EU zone only. During the company's expansion period, appropriate regulations will also be met accordingly to jurisdictions.

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## Appendix 1

### Appendix 1: Preliminary Organizational Chart and Key Entities



Legend:

Entity

Platform

— Commitment —>

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## Appendix 1



*Polybius Foundation* is a financial company, established in 2017 and registered in Estonia with the main office located in Tallinn, Estonia.

The main focus area of the Foundation is outlining and executing the projects behind or related to the *Polybius* infrastructure; selling *Polybius Tokens* to cover *Polybius* products; execution of *PolyTrust Trustee* services; product development of the *PolyID* platform and promotion of *Polybius Bank* project.

*Polybius Foundation* will be the trustee promoter and holder of licenses for *Polybius Bank*, *PolyTrust*, and *PolyID*, and is legally accountable for *PolyTrust* trustee services.

*Polybius Token* or *PLBT* is a profit-share smart contract. The token is issued within an eToken contract and is written using Solidity programming language by *Ambisafe* company. The system architecture is outlined in a dedicated document.

*PolyID* – has (or will have) the option of being an eIDAS compliant function, as an eID Scheme authorised as a valid European eID and owned by Polybius Foundation. *PolyID* function is to authenticate individuals as valid customers of *Polybius Bank* or *P.I.* and to provide access as users of the *Digital Pass* and *PolyTrust* services.

*PolyTrust* – eIDAS compliant Trustee Service acting on behalf of customers authenticated by the *PolyID* eIDAS compliant function, allowing access and storage of critical data (such as related to finance or health). *PolyTrust* is owned by Polybius Foundation.

*HashCoins OÜ* is an IT company, registered and established in 2013 in Estonia headquartered in Tallinn. The main focus areas of the company are development of authentication and security systems; creation of decentralised and distributed ledger (DLT) solutions; and provision of cloud computing services.

*HashCoins OÜ* will initially be the servicer and the provider of cloud and DLT storage, security, servicing and redundancy solutions for *Polybius* infrastructure including the *Digital Pass* services.

*Digital Pass* is the codename for an environment encompassing *Polybius* eIDAS compatible identification and authentication of its users and authorization of payment and other services implemented into the service proposals of *Polybius Bank* or *P.I.*

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**polybius**

POWERED BY HASHCOINS



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