Crypto-Fiat Exchange & Investment Platform

Product Specification

1. Executive Summary

This business plan outlines a **regulated crypto-fiat exchange and investment platform** based in Lithuania, with a roadmap for EU expansion. The platform's core value proposition is to connect cryptocurrency investors with real-economy **SME (small/medium enterprise) loans**. Investors fund loans using crypto assets, which are converted into euros via an internal exchange, enabling SMEs to receive funding in fiat. In return, investors receive a tokenized stake in the loan (Crypto LITAS) and earn monthly repayments. The platform leverages Lithuania's advanced fintech ecosystem and crypto-friendly regulatory environment to launch locally before scaling across the EU (European Crypto License | Markets in Crypto-Assets Regulation MiCA) (European Crypto License | Markets in Crypto-Assets Regulation MiCA). Revenue is primarily **transaction fee-based**, ensuring a sustainable model as transaction volumes grow. By merging the high-yield potential of peer-to-peer lending with the liquidity of crypto markets, the platform offers crypto holders a new investment avenue while providing Baltic SMEs easier access to capital (Best P2P lending platforms in Europe | Sites with P2P loans).

Initial market focus will be on Lithuania and the Baltic region, where **crypto adoption is strong** (around 11% of Lithuanians have invested in crypto, among the highest rates in the EU (Ranked: Crypto Popularity Across European Union Nations)) and **fintech infrastructure is robust**. Lithuania is the EU's largest fintech hub by number of licenses (Fintech and Financial Services - Invest Lithuania), hosting over 250 fintech companies including major electronic money institutions (AML Regulations and Licensing Requirements in Lithuania - Sumsub). This favorable environment provides a launchpad for the platform to develop in full compliance with EU regulations. As the platform matures, the business will seek **EU passporting** of its licenses to enter other markets, taking advantage of harmonized regulations for crowdfunding and crypto services. The **revenue model** centers on fees from exchanges, loan origination, and transactions, which scale with user activity. Over time, the platform aims to capture a share of Europe's growing alternative finance market by offering a regulated, efficient bridge between crypto capital and SME financing needs.

2. Business Model & Monetization

Business Model: The platform operates as a hybrid of a crypto exchange and a crowdfunding lending marketplace. Investors deposit cryptocurrency (e.g. BTC, ETH) which is converted to **Crypto LITAS** tokens via an internal exchange mechanism. These funds are then issued as loans to vetted SMEs in the form of a euro-pegged stablecoin called **Stable LITAS**. SMEs use Stable LITAS (1:1 with EUR) to fund their business needs or pay suppliers, and can redeem Stable LITAS for euros. Over the loan term, SMEs make monthly repayments (interest + principal) in EUR (or Stable LITAS), which are distributed back to investors. This model enables frictionless crypto-to-fiat conversion for real-world lending, while giving investors a tokenized asset that can be traded or held for income.

Revenue Sources: The platform's monetization is primarily through **fees on transactions and services**, aligned with market practices for crypto-fiat platforms:

- **Trading/Exchange Fees:** A small fee on converting crypto to Stable LITAS and vice-versa, and on trading Crypto LITAS in the secondary market. Crypto exchanges typically charge between 0.1%–0.5% per trade for active traders (Crypto Fees: A Full Breakdown and How To Minimize Costs | Nasdaq) (with some retail platforms up to ~1%), so our fee model will be competitive (e.g. ~0.5% per conversion or trade). Currency exchange fees for P2P investments generally stay below 2% (Best P2P lending platforms in Europe | Sites with P2P loans), and we aim to keep conversion costs low to attract volume.

- **Loan Origination Fees:** A fee charged to SME borrowers upon successful funding of a loan (for example, 1–3% of the loan amount). Many P2P lending platforms generate the majority of revenue from fees to loan originators; for instance, Mintos (a large EU P2P platform) earns ~80% of its revenue from fees charged to lenders for financing loans (Mintos Review 2025: P2P Market Leader Worth Investing Again?). We will adopt a similar practice by charging SMEs an origination or arrangement fee when their loan is funded. This fee can either be a percentage of the loan or built into the interest rate spread.

- **Repayment/Servicing Fees:** A small cut of each repayment or interest amount as a servicing fee. This could be, for example, 0.5–1% of each payment, to cover handling and distributing funds to investors. Such fees are often indirect (included in the rate paid by borrowers) to avoid reducing investor yields.

- **Merchant Redemption Fees:** When businesses or merchants redeem Stable LITAS for EUR, the platform may charge a nominal redemption fee (e.g. 0.5%). This creates an incentive for users to keep value within the ecosystem but also monetizes exits. For example, if a merchant has received Stable LITAS through the SMEs spending and wants to cash out to a bank account, a 0.5% fee on that conversion provides revenue for the platform's treasury services.

These diversified revenue streams ensure the platform captures value at multiple points: entry (exchange), deployment (origination), and exit (redemption). The **key revenue driver** is transaction volume – more investments and repayments mean more fees. This fee-based model is scalable and aligns with industry norms, providing profitability as the user base and loan portfolio grow.

Market-Practice Fee Structures: In designing fees, we benchmark against both crypto exchanges and crowdfunding platforms to remain attractive. Major crypto exchanges like Binance or Coinbase charge trading commissions in the low tenths of a percent, often **0.1%–0.2% for makers and up to 0.5% for takers** (Crypto Fees: A Full Breakdown and How To Minimize Costs | Nasdaq), whereas P2P lending platforms often charge investors little or nothing directly but charge borrowers or loan originators a significant fee (Mintos Review 2025: P2P Market Leader Worth Investing Again?). Our model follows this hybrid approach: low fees for investors (to encourage participation and liquidity) and earning more from the borrower side and conversion services. We will also maintain transparent pricing – clearly disclosing fees – to build trust, which is critical in financial services.

Competitive Advantage (Baltic Market): In the Baltic region, the platform differentiates itself by offering an **integrated crypto-to-SME financing solution** that currently has few direct competitors. Traditional P2P lenders in the region (and Europe) deal primarily in fiat, while crypto lending platforms usually focus on over-collateralized crypto loans or DeFi and not on funding real economy businesses. Our platform bridges that gap, targeting the underserved segment of **small business loans that banks often neglect** (Best P2P lending platforms in Europe | Sites with P2P loans). Key competitive advantages include:

- **Regulatory Compliance & Local Presence:** Being based in Lithuania, we benefit from a progressive regulatory regime for fintech and crypto. Lithuania is known as a crypto-friendly jurisdiction with a **transparent and cost-effective authorization process for crypto exchanges and wallet services** (European Crypto License | Markets in Crypto-Assets Regulation MiCA). This has even attracted major players like Binance to get licensed in Lithuania (European Crypto License | Markets in Crypto-Assets Regulation MiCA). By securing the proper Lithuanian licenses, we gain credibility and the ability to passport services across the EU, outpacing competitors who might face regulatory hurdles. Our deep local knowledge and compliance focus make us a trustworthy option in the Baltic market.

- **First-Mover in Crypto-Fiat Lending:** In the Baltics, few if any platforms allow **crypto investors to directly fund SME loans**. We will be among the first to market with this model, capturing crypto-savvy investors who seek diversification into fixed-income-like products, as well as SMEs open to alternative financing. This first-mover advantage can yield network effects – attracting merchants and SMEs who want to tap into crypto capital, and crypto holders looking for stable euro-based returns.

- **Integrated Stablecoin for Local Commerce:** By introducing Stable LITAS (pegged to the euro but named after the historic Lithuanian currency), we also position ourselves as

a **payment innovator** in the region. Merchants who receive Stable LITAS from borrowers can use it among other merchants or easily convert to fiat. This adds a **payment utility** angle that pure P2P platforms lack. In a Baltic market with high digital adoption and existing openness to crypto (Estonia and Lithuania have ~11–12% crypto investor rates (Ranked: Crypto Popularity Across European Union Nations)), a local euro-backed stablecoin can be quickly embraced for its low friction and 24/7 transfer capabilities.

- **Baltic Fintech Ecosystem Leverage:** Lithuania's status as the EU's top fintech hub provides access to talent, partners, and infrastructure. The country is a *"powerhouse of financial innovation"* with the largest number of fintech licenses in the EU (Fintech and Financial Services - Invest Lithuania). Many electronic money institutions (EMIs) and payment processors (like Revolut, TransferGo, etc.) operate from Lithuania (AML Regulations and Licensing Requirements in Lithuania - Sumsub), meaning we can form partnerships (for banking-as-a-service, KYC providers, etc.) more easily. This supportive ecosystem is a competitive edge compared to operating from jurisdictions with less fintech focus.

In summary, the business model is designed to monetize the flow of funds through the platform while offering competitive fees and unique value. By aligning our revenue streams with successful industry models and leveraging regional advantages, we aim to achieve sustainable growth and become a leader in the crypto-fiat lending space in Lithuania and beyond.

3. Token Economics (Crypto LITAS & Stable LITAS)

Our platform employs a **two-token system** to facilitate investments and transactions: **Crypto LITAS** and **Stable LITAS**. Each token serves a distinct purpose and is structured to maintain stability or accrue value appropriately:

- **Crypto LITAS (Investment Token):** Crypto LITAS is a **fluctuating-value investment token** representing an investor's stake in the platform's loan portfolio. When investors fund loans, they receive Crypto LITAS tokens equivalent to the euro value of their investment (e.g., investing €1000 worth of crypto yields 1000 Crypto LITAS at issuance, assuming 1 token = €1 initial value). These tokens are **not stable**; their market price can fluctuate based on supply and demand in the internal exchange and the performance of underlying loans. Essentially, Crypto LITAS tokens entitle holders to a proportional share of the loan repayments coming from SMEs. As borrowers repay monthly, investors earn returns, and the token's intrinsic value is supported by those expected cash flows.

  Mechanics: The platform may treat all funded loans as part of a **common investment pool** (or segmented by risk tiers), and Crypto LITAS acts like a share in that pool. When loans are performing well and interest payments are coming in, demand for Crypto LITAS may rise (investors anticipate steady returns), which can drive the price up.

Conversely, if defaults increase or market interest rates change, the token price might fall to reflect lower expected returns. Investors have two ways to realize ROI: (1) **Hold Crypto LITAS to maturity** and collect monthly payouts (interest and principal) proportional to their token holdings, or (2) **Sell Crypto LITAS on the secondary market** at any time for liquidity. The secondary market allows an investor to exit early by selling tokens to others who want to step into the remaining loan cash flows.

Investor ROI: Investors receive **monthly repayments** in proportion to how many Crypto LITAS they hold relative to a loan or pool. For example, if an investor's tokens correspond to 5% of a particular loan, they will receive 5% of that loan's monthly payment (interest + principal). These repayments are distributed in **Stable LITAS** (or directly in EUR to a wallet) to the investor's account. Over the life of the loan, the investor will recoup their principal and interest through these installments. The **annual yield** depends on the loan interest rate minus any platform fees and defaults. If an SME loan yields 10% p.a. and default rates are low, Crypto LITAS holders could earn high single-digit returns. Should an investor choose to sell Crypto LITAS mid-loan, the price they get will factor in the remaining expected payments – an efficient market will price tokens close to the net present value of future cash flows. This gives investors flexibility: they are not locked in for the full loan term.

Fluctuation and Risk: Unlike Stable LITAS, Crypto LITAS is **not pegged** to any fixed value. Its price will fluctuate based on: remaining loan principal backing it, interest rates, credit risk, and market demand. If a borrower defaults, the loss will be borne by Crypto LITAS holders (reducing the value of tokens, since the expected repayments shrink). On the upside, if overall loan interest rates rise or default outcomes are better than expected, tokens could trade at a premium. The platform's role is to facilitate a transparent market for this token. Crypto LITAS provides a **tokenized ROI mechanism** for crypto investors, turning what would be an illiquid loan claim into a tradable asset.

- **Stable LITAS (EUR Stablecoin):** Stable LITAS is a **euro-backed stablecoin** used to disburse loans to SMEs and serve as a transaction medium on the platform. Each Stable LITAS is pegged 1:1 to the euro and fully backed by fiat reserves. Technically, Stable LITAS will be a crypto token (potentially on a blockchain ledger) that **purports to maintain a stable value by referencing one official currency (EUR)** (Blockchain & Cryptocurrency Laws 2025 | Lithuania). In regulatory terms, under the EU's MiCA framework this qualifies as an "e-money token" since it's tied to a single fiat currency (Blockchain & Cryptocurrency Laws 2025 | Lithuania). The supply of Stable LITAS increases only when investors' crypto is converted to fiat for loan disbursement, and decreases when it is redeemed for fiat.

  Usage by Merchants and SMEs: When an SME's loan is approved and funded, the platform mints new Stable LITAS equal to the loan amount (backed by the equivalent euros obtained from converting the investor's crypto). The SME can then use the Stable LITAS in two ways: (1) **Redeem to EUR** – the platform will transfer euros to the SMEs

bank (from the reserve account) and burn the corresponding Stable LITAS tokens, or (2) **Transact within the Ecosystem** – the SME can pay vendors or expenses directly with Stable LITAS. Other businesses (merchants) may accept Stable LITAS for goods/services, especially if they are part of the platform's network, because they trust it can be redeemed 1:1 for euros. This creates a mini digital economy around the token. For example, a construction SME might pay a supplier in Stable LITAS; the supplier can then aggregate Stable LITAS from multiple customers and redeem them for EUR via the platform (minus a small fee). Throughout this circulation, the total Stable LITAS in existence is always matched by euros in custody, ensuring stability.

Peg and Reserve Management: Maintaining the 1:1 peg is paramount. The platform will hold all customer euro funds backing Stable LITAS in a **segregated escrow account** with a reputable bank or e-money institution. Whenever Stable LITAS is issued, an equivalent amount of fiat is placed in reserve. Whenever Stable LITAS is redeemed, the token is burned and fiat is released from reserve. This model follows the principle of full collateralization, similar to regulated stablecoins or e-money issuers. Audits and transparency reports will be provided so that users and regulators can verify that every Stable LITAS is backed by an actual euro. According to MiCA, e-money tokens like Stable LITAS are essentially treated as electronic money (Blockchain & Cryptocurrency Laws 2025 | Lithuania), which means we must safeguard the fiat one-to-one. The platform will not offer interest on Stable LITAS holdings (MiCA actually **prohibits interest on EMTs** to avoid them competing with bank deposits (Stablecoins can be issued only by the companies holding EMI license)). However, the reserve funds might be invested in **low-risk, liquid assets** (e.g. government bonds) to earn some yield for the company, as allowed by regulations (Stablecoins can be issued only by the companies holding EMI license), ensuring we can cover operating costs of the stablecoin infrastructure.

Redemption Process: To redeem Stable LITAS, a user (SME or merchant) will initiate a request on the platform. Upon KYC verification and compliance checks, the platform will deduct the Stable LITAS from the user's balance (burning the tokens) and transfer the equivalent EUR amount to the user's bank account. We aim for redemptions to be processed promptly (same-day or next business day for EUR SEPA transfers). A small redemption fee may apply as noted (part of revenue model). This redemption mechanism guarantees that Stable LITAS maintains a hard peg at €1.00, as users can always swap it for real euros from the reserve. In effect, Stable LITAS functions like a digital representation of euro held in custody, providing the convenience of crypto transactions with the stability of fiat money.

Investor ROI and Example: Suppose an investor uses 1 BTC (converted to €25,000) to invest in an SME loan via the platform. They receive €25k worth of Crypto LITAS. The SME borrower gets €25k in Stable LITAS (which they redeem to EUR to use). The loan term is 2 years at 8% annual interest, paid monthly. Each month, the borrower will repay roughly €1,130 (a mix of

principal and interest) to the platform's account. The platform then distributes, say, €1,100 in Stable LITAS to the investor (keeping €30 as part of a fee, for example). The investor can hold those Stable LITAS, reinvest them, or cash out to fiat. Over 24 months, the investor will receive the full €25k principal back plus interest (around €2,100 interest gross, minus fees and any default adjustments). If the investor doesn't want to wait 2 years, after some time they could sell their remaining Crypto LITAS tokens. For instance, after 12 months, perhaps €13k of principal is still due from the borrower; the investor could sell their tokens representing that €13k for near face value (assuming credit outlook is good) to another investor who will then receive the remaining payments. In case of **default**, the process changes: if the borrower fails to pay, the platform will attempt recovery (legal action, collateral enforcement if any). Any unrecovered amount is a loss to investors – the Crypto LITAS linked to that loan would drop in value (potentially to zero if the loan is a total loss). However, this default does *not* affect Stable LITAS's value, because Stable LITAS is just the medium of exchange and always backed by fiat; the loss is absorbed by the investment token holders, not the stablecoin holders.

In summary, **Crypto LITAS** provides the upside (and risk) exposure – it tokenizes the loan investment – whereas **Stable LITAS** provides the stability and liquidity needed for real-world usage. This two-token system allows clear separation of concerns: one for investment growth and income, the other for predictable payments and value storage. By structuring the tokens this way, the platform aligns with regulatory expectations (treating the stablecoin as e-money) and offers investors tradability and liquidity that traditional loan investments lack.

4. Regulatory & Licensing Requirements

Operating a crypto-fiat lending platform in Lithuania (and the EU) requires careful adherence to multiple regulatory regimes. We have identified the key licenses and compliance requirements as follows:

Lithuanian Registration as Crypto Service Provider (VASP/CASP): Currently, Lithuania regulates crypto platforms through a national authorization for virtual asset service providers (VASPs). Any company exchanging crypto to fiat or offering crypto custody must register with Lithuanian authorities (specifically, the FCIS) and meet AML requirements. Lithuania is known for a **transparent and efficient crypto authorization process**, being one of the few EU countries offering a clear legal path for crypto exchange and wallet services (European Crypto License | Markets in Crypto-Assets Regulation MiCA) (European Crypto License | Markets in Crypto-Assets Regulation MiCA). For example, in 2020 Binance obtained a Lithuanian crypto exchange and custody license (European Crypto License | Markets in Crypto-Assets Regulation MiCA). Our platform will similarly obtain a **Crypto Exchange and Wallet Service Provider authorization** in Lithuania. This covers activities such as exchanging crypto to fiat (and vice versa) and safeguarding clients' crypto assets (European Crypto License | Markets in Crypto-Assets Regulation MiCA).

Under this registration, we must comply with Lithuania's AML/KYC laws. Recent updates (effective 2024) require VASPs to maintain a minimum €125,000 capital, have a local

AML/Compliance officer, and meet fitness and propriety tests for management (Blockchain & Cryptocurrency Laws 2025 | Lithuania) (Blockchain & Cryptocurrency Laws 2025 | Lithuania). We will ensure our company is capitalized and structured to meet these rules, including hiring an experienced Lithuania-based MLRO (Money Laundering Reporting Officer) and implementing robust AML policies (customer due diligence, transaction monitoring, record-keeping, reporting to the FIU, etc.) (European Crypto License | Markets in Crypto-Assets Regulation MiCA) (European Crypto License | Markets in Crypto-Assets Regulation MiCA). This VASP registration will allow us to legally operate the crypto exchange aspect of the platform in Lithuania and, importantly, to **passport services across other EU countries** until MiCA comes fully into effect (European Crypto License | Markets in Crypto-Assets Regulation MiCA). (Lithuanian law currently permits a VASP to serve foreign clients as long as there's a substantial operation in LT, avoiding the entity being just a shell (Blockchain & Cryptocurrency Laws 2025 | Lithuania).)

MiCA Compliance (CASP License & Stablecoin Issuer): The EU's Markets in Crypto-Assets (MiCA) regulation was adopted in 2023 and is in the process of being implemented. MiCA will harmonize crypto regulation across Europe, introducing a single license regime for Crypto-Asset Service Providers (CASPs) and specific requirements for stablecoin issuers (European Crypto License | Markets in Crypto-Assets Regulation MiCA). MiCA's timeline has **stablecoin (asset-referenced and e-money tokens) rules applying by June 2024**, and CASP rules by Dec 2024 (Stablecoins can be issued only by the companies holding EMI license) (Stablecoins can be issued only by the companies holding EMI license). Our platform will proactively prepare to transition from national VASP registration to a full **CASP license** under MiCA. This will involve meeting prudential and conduct requirements set by MiCA, such as capital adequacy, governance, consumer protection, and ongoing disclosure obligations.

Under MiCA, Stable LITAS is classified as an **E-Money Token (EMT)**, since it is backed by a single fiat currency (EUR) (Blockchain & Cryptocurrency Laws 2025 | Lithuania). MiCA effectively **equates EMTs to traditional electronic money**, meaning that only credit institutions (banks) or licensed Electronic Money Institutions (EMIs) will be allowed to issue e-money tokens (Stablecoins can be issued only by the companies holding EMI license). To comply, our platform will need to either **obtain an EMI license** in an EU member state (likely Lithuania) or partner with an existing licensed EMI to issue and manage Stable LITAS. Obtaining an EMI license in Lithuania is feasible – the country has a well-established process and is home to many EMI licensed firms. An EMI license will authorize us to issue electronic money (the digital EUR backing Stable LITAS) and handle payment services, under supervision of the Bank of Lithuania. Given the complexity, an interim strategy could be partnering with a local EMI that holds client funds on our behalf and issues the stablecoin as their product (white-label) while we operate the crypto side. However, for full control and long-term scalability, we plan to pursue our own **EMI authorization**, aligning with MiCA's requirement that e-money token issuers be regulated like e-money issuers (Stablecoins can be issued only by the companies holding EMI license).

In addition to the stablecoin issuer requirements, as a CASP we will need to comply with MiCA's rules for crypto exchanges and custodians. These include prudential safeguards (e.g.

maintaining a certain amount of own funds or insurance), operational resilience, segregation of client crypto assets, and clear **disclosure to users of risks** associated with crypto investments. We will closely follow the MiCA implementation timeline and engage with regulators early. The Bank of Lithuania has issued guidance and "expectations" letters to crypto service providers in anticipation of MiCA (Blockchain & Cryptocurrency Laws 2025 | Lithuania), which we will adhere to. By being an early adopter of MiCA standards, we aim to smoothly passport our services EU-wide once the regulation is fully active.

ECSP Crowdfunding License: Because our platform facilitates **lending-based crowdfunding (peer-to-peer lending) for business projects**, we fall under the scope of the European Crowdfunding Service Providers Regulation (EU) 2020/1503. The ECSP Regulation, effective November 2021, **creates a unified license for investment- and lending-based crowdfunding across the EU** (Regulation on European Crowdfunding Service Providers (ECSP) - CrowdfundingHub). Any platform raising up to €5 million per project per year for businesses must obtain this ECSP authorization to operate legally in the EU. In Lithuania, the Bank of Lithuania is the competent authority to grant the ECSP license (or it may be the central financial regulator authority, as designated). We will apply for an **ECSP Crowdfunding Service Provider license**, which involves meeting requirements on investor protection, disclosures, governance, and operational safeguards (Regulation on European Crowdfunding Service Providers (ECSP) - CrowdfundingHub). Notably, ECSP has rules such as providing a Key Investment Information Sheet (KIIS) for each project, conducting at least basic due diligence on project owners (SMEs), having procedures for handling default and conflicts of interest, and possibly limits on how much non-sophisticated investors can invest per project.

By obtaining an ECSP license, our platform can **passport crowdfunding services across all EU member states** easily (Regulation on European Crowdfunding Service Providers (ECSP) - CrowdfundingHub) (Regulation on European Crowdfunding Service Providers (ECSP) - CrowdfundingHub), which aligns perfectly with our expansion plans. It will also enhance our credibility: ECSP imposes an **enhanced investor protection framework** (transparency, risk management, etc. (Regulation on European Crowdfunding Service Providers (ECSP) - CrowdfundingHub)) that will assure users our platform meets high standards. We will likely structure our offering such that the tokenization aspect (Crypto LITAS) aligns with ECSP rules – effectively, Crypto LITAS represents a transferable claim on a loan (which might be considered a security or other financing instrument). We will work with legal counsel to ensure the offering either fits within ECSP's allowed instruments or seek any needed approvals for the token format.

Other Compliance Considerations:

- **KYC/AML:** As mentioned, both VASP and ECSP regimes demand strict AML compliance. We will implement full **KYC (Know Your Customer)** verification for all investors and SMEs at onboarding. This includes identity verification, screening against sanctions and PEP (Politically Exposed Persons) lists, and assessing the source of funds for large crypto deposits. Transactions will be monitored for suspicious activity, and any large crypto-to-fiat conversions will undergo enhanced due diligence in line with

AMLD5/6 requirements. Regular reporting to Lithuania's FIU will be done for any suspicious transactions (European Crypto License | Markets in Crypto-Assets Regulation MiCA). The platform will also have an AML/CFT policy and training programs as required (Blockchain & Cryptocurrency Laws 2025 | Lithuania).

- **Data Protection (GDPR):** Operating in the EU means compliance with the General Data Protection Regulation. We will ensure user data (personal info, transaction history) is stored securely and used only for legitimate purposes with consent. Privacy policies and possibly a Data Protection Officer (DPO) will be put in place given the volume of financial personal data.

- **Consumer Protection and Transparency:** Both MiCA and ECSP emphasize protecting investors. We will clearly disclose all risks (crypto volatility, loan default risk, etc.) to users in plain language. Non-professional (retail) investors may have to undergo an appropriateness test under ECSP to ensure they understand the product. We'll also provide ongoing information, such as loan performance updates, stablecoin reserve attestations, and financial statements, to maintain transparency.

- **License for Secondary Trading:** If Crypto LITAS tokens are deemed transferable securities or other financial instruments, operating a secondary market might invoke MiFID II or Multilateral Trading Facility (MTF) regulations. However, ECSP provides some exemptions for the crowdfunding context (like a bulletin board for trading loan stakes). We will design the exchange aspect to either fit under ECSP permissions or seek separate regulatory approval if needed (e.g., an MTF license) for the token exchange. Legal analysis will be done to avoid operating an unlicensed investment exchange.

In conclusion, the platform's regulatory strategy is to **embed compliance from day one**. We will obtain a Lithuanian VASP registration, pursue an **EMI license or partnership** for stablecoin issuance, secure the **ECSP crowdfunding license** for lending services, and transition into MiCA's CASP regime. This multi-faceted approach ensures we can legally handle **crypto, fiat, and lending operations**. Engaging proactively with the Bank of Lithuania and other EU regulators will be a priority for the legal team, as we aim to be seen as a model case of a compliant crypto-enabled crowdfunding platform under the new EU rules.

5. Technical & Functional Specification

The platform's technical architecture will be designed to seamlessly manage crypto assets, fiat funds, and loans while ensuring security and compliance. Below we outline the key components and user flow, as well as security measures and system architecture considerations:

System Architecture: The platform consists of several integrated modules:

- **User Interface and Account System:** A web and mobile application where users (investors and SMEs) register, complete KYC, and manage their accounts. This front-end will show dashboards with portfolio performance, loan listings, wallet balances (crypto, Stable LITAS, etc.), and allow initiating transactions (investments, withdrawals, redemptions).

- **Crypto Wallet & Custody Module:** This handles deposit and storage of cryptocurrencies from investors. For security, the platform will use a mix of **hot wallets** (for handling immediate transactions) and **cold storage** (for holding the majority of crypto assets offline). Each user will have an account-linked crypto wallet address to deposit supported cryptocurrencies. Upon deposit, our system confirms the transaction on-chain and credits the user's account. We will likely support major cryptos (BTC, ETH) initially for funding, potentially expanding to stablecoins (USDT, USDC) to simplify conversion. Private keys for custody wallets will be secured using HSMs (Hardware Security Modules) or multi-signature arrangements to mitigate the risk of a single point of failure. The custody module also interfaces with our internal exchange to convert crypto to Stable LITAS (or to EUR).

- **Internal Crypto-Fiat Exchange Engine:** This is a core component that converts investor crypto into fiat liquidity for loans. It can be implemented in two ways: (1) **Order Book or Liquidity Pool** – an internal exchange where Crypto LITAS/Stable LITAS tokens are traded against crypto or fiat; and/or (2) **Integration with External Exchanges** – automatically selling incoming crypto on external markets for EUR. Initially, for simplicity and avoiding slippage, we may directly exchange incoming crypto deposits via a third-party exchange or OTC desk to get euros, which back the Stable LITAS we issue. As volume grows, we can maintain an internal liquidity pool (like a reserve of Stable LITAS vs crypto) to facilitate quicker swaps. The exchange engine also powers the **Crypto LITAS secondary market**: it will maintain an order book where investors can place buy/sell orders for Crypto LITAS using Stable LITAS (or possibly other crypto). Matching engine logic will execute trades, and we will ensure compliance (only whitelisted KYC'ed users can trade; no anonymous wallets). Pricing on this exchange is market-driven, but we may use price oracles and risk models to suggest a reference price for Crypto LITAS based on underlying loan value.

- **Lending & Escrow Module:** This manages the loan funding process. When an SME is approved for a loan, a loan contract entry is created in the system with a target amount, interest rate, term, etc. Investors can commit funds to this loan (similar to a crowdfunding pledge). The platform will likely **escrow investor commitments** until the loan's target is reached. If using an on-chain approach, a smart contract could be used to hold Crypto LITAS or crypto funds in escrow and only release/mint Stable LITAS once the loan is fully funded. If the loan fails to reach the target by the deadline, funds are returned to investors' wallets (escrow cancellation). For each funded loan, the system mints the appropriate amount of Stable LITAS and assigns it to the SME's wallet (or directly to the SME's payout process). The loan module also calculates the amortization schedule and

sets up automated **repayment collection** instructions.

- **Fiat Banking Integration:** Since fiat EUR is involved (for redemption and reserve management), we will integrate with a banking partner or EMI. This could be through APIs to initiate SEPA transfers, check account balances, etc. The fiat module will track the euros in the reserve account such that every Stable LITAS corresponds to a real euro. When an SME redeems Stable LITAS for fiat, this module triggers a bank transfer to the SME and updates the reserve ledger (and instructs the stablecoin contract to burn tokens). Similarly, when an SME makes a monthly repayment (likely via bank transfer to our account), this module confirms the receipt of funds and credits the appropriate amount of Stable LITAS (or directly posts a fiat transaction) to investors.

- **Stablecoin Smart Contract:** Stable LITAS will be implemented as a smart contract on a blockchain (potentially Ethereum or an EU-compliant chain). The contract will have functions to mint and burn tokens, and perhaps to freeze tokens if needed (for compliance or account recovery). The platform backend will be the only entity allowed to mint/burn, based on real fund flows. We will build in compliance hooks (e.g., only whitelisted addresses from our platform can hold the stablecoin, to prevent illicit use outside the platform's oversight, unless we later open it up). The contract will be audited for security since it handles potentially large value.

- **Smart Contracts for Loans/Crypto LITAS:** We will consider representing Crypto LITAS tokens also on-chain (as an ERC-20 or similar). However, since Crypto LITAS is closely tied to platform operations and potentially needs more complex logic (amortization, default handling), we might keep it off-chain in the platform database for the initial phase and only allow trading within the system. As we mature, we could tokenize these on-chain as well, but with restrictions to comply with securities laws (maybe using a permissioned token standard). Escrow of funds and distribution of repayments can be automated by smart contracts – e.g., a contract per loan that holds investor tokens and releases stablecoin to them periodically. These technical decisions will be guided by balancing transparency (on-chain where possible) with regulatory control (whitelisting investors, etc.).

User Flow: The end-to-end user experience can be described in stages:

1. **Onboarding:** A new user downloads the app or visits the site. They register with email/phone, then complete KYC verification by uploading ID and proof of address. Once approved, they get access to the platform services.

2. **Investor Deposit & Conversion:** An investor can deposit cryptocurrency into their account. The app generates a deposit address (e.g., a Bitcoin address) or uses an integrated wallet. After the crypto deposit confirms, the user sees their crypto balance. They can then convert this to **Crypto LITAS** via the internal exchange. For example, the user chooses to convert 0.1 BTC to Crypto LITAS; the system quotes an exchange rate

(using current BTC-EUR market rate minus a small fee). On confirming, the BTC is sold (internally or externally) and the user receives the corresponding amount in Crypto LITAS tokens in their portfolio. Now those funds are ready to invest. (Alternatively, we may allow direct investment with crypto, in which case conversion to Crypto LITAS happens in one step when funding a loan.)

3. **Browse & Invest in Loans:** The investor can browse a marketplace of SME loan opportunities. Each listing shows details: company info, loan purpose, amount needed, interest rate, term, risk rating, etc., along with the **Crypto LITAS** needed to invest (1 token per €1). The investor decides to invest, say, €500 (so 500 Crypto LITAS) into a particular loan. They allocate their tokens to that loan via a simple interface. The platform then locks those 500 tokens in the loan's escrow (they cannot be traded elsewhere once committed, unless the loan fails to fund). If the loan has multiple tranches or a pool, the mechanism might differ, but conceptually the investor's tokens are "committed."

4. **Loan Funding & Disbursement:** Once the loan is fully subscribed (reaches 100% of target), the platform finalizes the loan. The committed Crypto LITAS from all investors for that project are essentially "spent" – the platform deducts them (possibly burns them or marks them as issued) and in return mints the equivalent Stable LITAS tokens to the borrower's wallet. The borrower now has, for example, 100,000 Stable LITAS for their €100k loan. The borrower accesses these funds either by transferring to their bank (triggering a fiat withdrawal) or by spending Stable LITAS via a provided wallet (the platform might offer a business crypto wallet or card for convenience).

5. **Borrower Loan Use & Merchant Flow:** The SME uses the loan funds in their business. If they redeem to the bank, they simply get €100k in their account to deploy (the Stable LITAS tokens given to us in exchange are burned). If they use Stable LITAS directly, they might pay a supplier who also has an account. That supplier can then redeem those tokens or keep them to pay others. The platform will encourage some merchants (especially in Lithuania) to accept Stable LITAS by highlighting instant settlement and low fees compared to card payments.

6. **Repayments:** Each repayment period (e.g., monthly), the borrower will repay in EUR. Practically, we'll set up a direct debit or the borrower manually transfers the installment amount to our designated IBAN. When the payment is received, our system will **mint Stable LITAS equal to the payment** (if we consider that the euros go into reserve) and automatically distribute those Stable LITAS to all investors of that loan according to their share. Investors will get a notification of the incoming payment. For example, an investor who had 5% of the loan receives 5% of the Stable LITAS from that installment. These Stable LITAS appear in their account balance (as "Available funds"). The principal portion of the payment could optionally be used to **buy back** a portion of Crypto LITAS from investors, or we simply let the Crypto LITAS devalue as principal is returned. A straightforward approach is: we do not adjust Crypto LITAS supply every time; instead, investors simply get paid and the token gradually represents a claim on a smaller

remaining loan. This is an area where the mechanics will be refined – another method is to partially burn Crypto LITAS as principal is repaid, to keep each token roughly representing €1 of remaining loan. For now, we assume investors hold their tokens throughout and receive cash flows.

7. **Investor Withdrawal or Trading:** Investors, at any time, can convert their Stable LITAS (from repayments or idle funds) back to other crypto or euros. If an investor wants to **cash out** to fiat, they place a withdrawal request for, say, €500. The platform will burn €500 worth of Stable LITAS from their balance and initiate a €500 SEPA transfer to the investor's bank. If an investor wants to trade out of a loan early, they go to the exchange and place a sell order for their Crypto LITAS. For instance, they sell 500 Crypto LITAS at the current market price (which might be slightly below €500 if interest rates rose or above €500 if the loan is very high quality). Another user's buy order might match, or a market maker (possibly the platform itself in low liquidity periods) buys it. The seller then receives Stable LITAS (or directly other crypto) from the sale, which they can then withdraw or reinvest.

8. **Loan Maturity:** After the final payment, the loan is closed. At this point, if we haven't been burning Crypto LITAS along the way, the remaining Crypto LITAS tokens associated with that loan would effectively have no more claim (since principal and interest are fully paid). The platform could automatically redeem any last residual value or simply notify holders that the loan is settled and those tokens will be decommissioned. Ideally, we ensure that by final payment, investors have gotten their value out and the token has served its purpose.

9. **SME Platform Interaction:** SMEs will have their own dashboard to apply for loans, upload financial documents, get credit score, etc. They can track how much of their loan is funded in real-time during the campaign phase. Once funded, they can see their repayment schedule and due dates, with options to make manual payments or set up auto-debit. They also have the wallet interface for Stable LITAS to manage disbursement and any acceptance of stablecoin for payments.

Throughout this flow, **compliance checks** (like AML for large withdrawals, or ensuring only eligible investors invest certain amounts as per ECSP limits) are integrated. Smart contracts (for Stable LITAS and possibly for handling the escrow of Crypto LITAS) ensure that critical steps (like only minting stablecoin when funding is locked, or only paying investors when funds received) are executed fairly and transparently.

Security Measures: Security is paramount given the platform deals with both crypto assets and fiat money, as well as sensitive personal data. Key security measures include:

- **KYC/AML and Account Security:** Only verified users can transact, preventing anonymity that could facilitate fraud. We will implement **2-Factor Authentication (2FA)** on all sensitive account actions (logins, withdrawals, key account changes) to prevent

account takeover. User passwords are hashed and stored securely, and the system will have defenses against brute force and phishing (like email confirmations, anti-fraud monitoring). We will educate users on securing their credentials and recognizing social engineering.

- **Smart Contract Security:** All smart contracts (Stable LITAS token, and any investment contracts) will be **audited by independent security firms** before deployment. We'll follow best practices (e.g. using standardized open-source contract libraries for ERC-20) to minimize vulnerabilities. Features like pause functions or daily mint limits might be included so that if an anomaly is detected (e.g., suspected breach), the contracts can be temporarily halted to protect funds.

- **Crypto Custody Security:** Our crypto storage will utilize a **multi-signature scheme** for moving funds out of cold storage – requiring approvals from multiple senior team members to execute large transfers. Cold wallets will be kept offline with strict access controls (physical vaults or institutional custody service providers). For online (hot) wallets that deal with daily transactions, we will limit the balances to only what's necessary for operational liquidity, minimizing exposure. We will also consider **insurance** for crypto assets in custody to cover losses from extreme events (some insurers offer policies for theft of digital assets for custodians).

- **Fiat Funds Security:** Customer fiat funds (the euros backing Stable LITAS and any fiat awaiting withdrawal) will be kept in **segregated client accounts** at our banking partner or EMI. This ensures that even if our company faces financial trouble, those funds are protected and not comingled with corporate funds. Under e-money regulations, these funds may even be insolvency remote. Regular reconciliation between the Stable LITAS supply and bank account balance will be done (ideally daily). An external auditor or the EMI partner will verify this matching, boosting trust that the stablecoin is fully backed.

- **Platform & Cybersecurity:** We will employ modern cybersecurity frameworks: encryption of data at rest and in transit, regular security audits/penetration testing, and an incident response plan. All sensitive actions will be logged (audit trail) and monitored for anomalies (like an admin suddenly changing limits or an unusual trading pattern that could indicate a compromised account). The infrastructure will be cloud-based with proper network segregation, firewalls, DDoS protection, and failover capabilities for high availability. We'll also ensure continuous backups of critical data (with encryption) to recover from any data loss scenarios.

- **KYC/AML Systems:** We will integrate electronic KYC providers to verify identity documents and check watchlists. AML transaction monitoring software will run in the background to flag unusual behaviors (like rapid in-and-out conversions which might indicate money laundering layering). If suspicious activity is detected, our compliance team can freeze the account and investigate, in line with regulatory obligations.

- **Escrow and Contractual Protections:** To protect investors, funds for an unfunded loan are kept in escrow and not accessible by the SME until conditions are met (full funding and contract signing). Likewise, an SME cannot just disappear with funds without legal agreements – we will have loan agreements in place and possibly security/collateral when applicable to enforce repayment. The legal framework (not just technical) acts as security for investor capital.

- **User Privacy & Data Security:** Personal data will be stored in compliance with GDPR, using encryption and access controls. Only staff who need to handle KYC or support have access to PII (personally identifiable information). We will anonymize data in analytics and never share user info with third parties without consent or legal basis.

Technology Stack: On the back-end, a robust framework (e.g., Node.js or Python for server logic, with a PostgreSQL database) will handle business logic and data. Smart contracts (likely Solidity for Ethereum) manage on-chain parts. The front-end could be a modern JavaScript framework (React/Vue) for web and native iOS/Android apps for mobile. We'll incorporate RESTful or GraphQL APIs that can also be opened (with API keys) for users who want programmatic access (advanced investors might want to automate trading via API). Our architecture will separate concerns: the trading engine runs as a high-performance service (possibly C++ or Go for speed), while the general web application runs separately to ensure trading doesn't slow down due to web traffic. We will follow as many **open standards** as possible, like GraphQL, BIAN.org, Open Banking (Berlin), and many others.

We will design the system to be **scalable** (microservice architecture where and if appropriate, containerization if trough orchestration, cloud auto-scaling) to handle increasing load as more users and transactions come in. Initially, while volumes are small, we can use simpler setups, but with an eye to refactor into more distributed components as we grow.

In summary, the technical implementation provides a secure bridge between crypto and fiat: from wallet management, through an exchange, to loan disbursement and repayment – all while keeping the user experience smooth and the funds protected. Security and compliance are ingrained at every level, ensuring the platform can gain user trust and meet regulatory scrutiny as it scales.