White paper

Royal Investment Bank Group

Royal Euro Stablecoin

Version 2024-01

Contents

1. Executive Summary

The Royal Euro stablecoin White Paper provides an in-depth exploration of the development, operational framework, and core attributes of the Royal Euro stablecoin (symbol REUR), issued by Royal Investment Bank Group. The Royal Euro represents the emergence of a novel category within the stablecoin ecosystem—one that transcends mere fiat-backing to embrace the concept of fiat-guarantee. This paradigm shift ensures that a stablecoin is not solely supported by fiat reserves but is underwritten by the full assurance of a banking institution, fortified by its robust risk management protocols and risk-averse practices. This distinction fundamentally alters the landscape of stablecoin security and reliability, instilling confidence in its stakeholders through the backing of a trusted banking entity.

The Royal Euro operates within a comprehensive asset segregation framework, ensuring that the assets supporting the stablecoin remain entirely distinct from the activities of the Royal Investment Bank Group. This segregation is meticulously administered through Verified Reserve Fund Deployment, overseen by tier one banks, thereby guaranteeing transparency and providing direct recourse for holders. In contrast to many stablecoins that rely solely on issuer testament statements, the Royal Euro employs a robust proof-of-reserves mechanism, harnessing Decentralized Oracle Nodes for verification. Euro cash reserves are maintained at 8-10% over collateralization for the minting of Royal Euro stablecoins at a 1:1 ratio, thus ensuring a perpetual 100% collateralization ratio.

The operational framework encompasses several pivotal components, including the Master Minter, Constant Price Impact Ratio Smart Contract, and Blacklist/Whitelist Management protocols. Together, these elements oversee minting, burning, security, compliance, and stability, safeguarding the integrity of the Royal Euro ecosystem. Royal Euros will be issued initially on MaalChain and Ethereum.

The Royal Euro, because of its innovative structure including the real-time availability of proof of reserves, will achieve wide and growing adoption in commerce, investments, and finance. Additionally, the Royal Euro is expected to be utilized as a bank-grade stablecoin for collateral to issue other stablecoins.

Section 1 | Royal Euro Stablecoin:

Fundamental Concepts

1. Advancing asset tokenization

Financial institutions and cryptocurrency companies are increasingly leveraging blockchain technology to issue, secure, and trade assets. With the significant advancements and growing adoption of Distributed Ledger Technology (DLT), policymakers worldwide are increasingly concerned about regulating DLT. Current DLT promoters barely consider the highly regulated environment of financial markets and the complexity of operations within existing market infrastructures, which are real barriers to adopt.

Several key regulations have been proposed or adopted regarding digital assets built on blockchain technology, such as the Market in Crypto Assets Regulation ("MiCA") and the "Pilot Regime" Regulation in the European Union. This underscores the necessity for public discourse on asset tokenization, including the establishment of common operational standards for verifying off-chain assets. Standardizing market practices and operational models will help mitigate the risks of fragmentation and facilitate interoperability among various tokenization projects. Moreover, such standardization is vital for ensuring compliance with financial regulations and fostering the development of a regulated digital asset industry.

In this whitepaper, asset tokenization denotes the process of transforming rights to an asset into a digital token using DLT. This procedure enables assets, whether physical (such as real estate or commodities) or financial (like fiat currency, stocks, or bonds), to be digitally represented and traded in a decentralized manner. Each token typically signifies a fraction or complete unit of the underlying asset, facilitating fractional ownership and enabling secure and efficient ownership transfer on a DLT platform.

The process of asset tokenization, as outlined in this White Paper, comprises a multifaceted concept that encompasses various stages involved in registering an asset on a blockchain, including pre-trade, trade, and post-trade phases. Best practices for asset tokenization should incorporate the following fundamental principles and objectives:

i. Digitization of financial assets from legacy physical documents. This entails moving away from conventional paper-based financial instruments to digital assets managed through DLTs, marking a significant advancement in capital markets. Asset tokenization introduces inherent digitized and potentially automated features to assets, facilitating faster and transparent property transfer processes, minimizing settlement, credit, and counterparty risks, and enabling seamless integration with digital asset and decentralized finance (DeFi) technologies. It aims to bridge centralized finance and decentralized finance markets, combining centralized wisdom and blockchain governance.

ii. Embracing decentralized blockchains as fundamental infrastructures of Web3. Disruptive market infrastructures and new business models will predominantly emerge from decentralized DLTs and native digital assets, akin to the birth of the information industry with the advent of the Web1.0. While challenges such as transaction costs and energy consumption persist, the inherent qualities of public DLTs, including adoption by vast IT developer ecosystems, interoperability, and resilience to cybersecurity risks, make them compelling for widespread adoption in regulated sectors like capital markets that face strong regulatory scrutiny.

iii. Permissioned access to assets and services regardless of the underlying technology (public or private blockchains). Permissioned assets and services on blockchains serve as effective tools for regulatory compliance, enhancing the accountability of service providers towards users and public authorities. Frameworks should be supported for tokenization to ensure confidence in markets for digital assets and the integrity of blockchain markets such as outlined in Regulation (EU) 2023/1114 of the European Parliament and of the Council dated 31st May 2023 on MiCA, which came into force in June 2023 (Official Journal of the European Union, 2023).

iv. Avoiding prejudice against decentralized DLT technology is crucial. Decentralized Distributed Ledger Technologies (DLTs) serve as tools that offer services to clients. It is important to impartially evaluate different DLTs to determine which ones are most relevant for upcoming digital markets. Prioritizing cross-chain interoperability and finding the right balance between innovation and security through iterative and "test and learn" methods are vital for the progress of decentralized DLTs.

v. Regulatory compliance as a primary concern. While innovation is integral to the financial sector, and open finance principles underpin this philosophy, any digital asset-related projects must prioritize compliance with existing regulatory requirements. Blockchains facilitate new interactions between market participants, regulators, and academics, enabling embedded compliance and supervision of digital markets. Enhanced data aggregation and standardization on blockchains offer transparency, aiding in regulatory compliance and risk management.

vi. Collaborative competition between market participants to develop standards, frameworks, and open-source software on digital assets to develop active use cases and products. This approach allows participants to benefit from each other's strengths, share resources, and create mutual value, while still striving to outperform each other in the market.

2. Stablecoins

Stablecoins have emerged as a popular solution within the digital asset market, offering stability amidst the volatility commonly associated with digital currencies. Their utility extends to various applications, catering to the needs of users and businesses operating within the blockchain ecosystem. However, concerns regarding regulatory compliance, reserve transparency, and redemption mechanisms highlight potential risks associated with stablecoins. It's crucial to recognize that the adoption and usage of stablecoins can vary depending on market dynamics, user preferences, and regulatory frameworks.

The stablecoin market has experienced significant growth in recent years, with the total market capitalization of stablecoins expanding rapidly. As of the latest available data, the size of the stablecoin market is estimated to be in the range of billions of dollars. According to a BIS paper (Kosse, Glowka, & Mattei, November 2023) , the market capitalization of stablecoins grew more than ninefold from 2020 to 2021, with the total market capitalization exceeding 35 times its value at the onset of the pandemic at the end of 2019. This growth was primarily driven by the increasing adoption of stablecoins like Tether and the introduction of new stablecoin projects into the market.

While the stablecoin market has shown substantial growth, it is essential to note that market conditions and dynamics can impact the size and trajectory of the stablecoin market. Factors such as regulatory developments, market volatility, and technological advancements can influence the growth projections of the stablecoin market.

The primary uses of stablecoins are:

- Medium of Exchange: Stablecoins serve as a reliable medium of exchange within the crypto ecosystem, facilitating transactions and trading activities with their stable value compared to volatile cryptocurrencies.

- Store of Value: Some users leverage stablecoins as a hedge against inflation and a means to preserve purchasing power during economic uncertainty, utilizing them as a store of value.
- Liquidity Providers in DeFi: Stablecoins play a vital role in decentralized finance (DeFi) platforms, where they act as liquidity providers for various financial services, mirroring traditional financial systems.
- Payment Purposes: While not extensively utilized for payments beyond the crypto sphere, stablecoins hold potential as widely accepted payment methods due to their stability compared to other cryptocurrencies.

Stablecoins have become a dependable and consistent option within the crypto market, offering users and businesses a range of advantages. Stablecoins offer a reliable and stable alternative within the blockchain ecosystem, providing users and businesses with benefits including price predictability, transaction efficiency, and risk management capabilities. The main advantages of stablecoins are:

- Price Stability: Stablecoins maintain a stable value relative to a peg, such as a fiat currency or a basket of assets, reducing volatility and providing predictability as a medium of exchange and store of value.
- Facilitate Transactions: Stablecoins enable fast and cost-effective transactions within the crypto ecosystem, facilitating international payments and remittances.
- Liquidity Provision: Crucial for DeFi platforms, stablecoins serve as collateral for borrowing and lending, trading pairs on exchanges, and stable assets for various financial services.
- Accessibility: Serving as a bridge between traditional financial systems and the crypto world, stablecoins allow for easy conversion between fiat currency and cryptocurrencies, making them accessible to a broad user base.
- Risk Mitigation: By pegging their value to stable assets, stablecoins help mitigate the risk of price fluctuations, offering stability for users seeking to hedge against market volatility.

As stablecoins continue to gain traction, their benefits extend beyond price stability to encompass enhanced transactional efficiency and robust risk management capabilities for users and businesses alike.

The stablecoin market has experienced significant growth and evolution in recent years, emerging as a crucial component of the broader digital asset ecosystem. Stablecoins are digital assets designed to maintain a stable value relative to a specific reference asset, such as fiat currencies like the US dollar or commodities like gold. They offer users the benefits of digital currencies, such as fast and borderless transactions, while mitigating the price volatility typically associated with other digital currencies like Bitcoin or Ethereum. The stablecoin market boasts a diverse array of options, with approximately 200 stablecoins available today (Bitpay, 2023)

One of the key drivers of the stablecoin market's growth is its utility in facilitating efficient and low-cost transactions within the digital asset space. Stablecoins serve as a bridge between traditional financial systems and blockchain-based platforms, enabling users to transact with the stability and security of established fiat currencies or commodities while leveraging the innovative features of blockchain technology.

Furthermore, stablecoins play a vital role in decentralized finance (DeFi) applications, where they serve as a fundamental building block for lending, borrowing, and trading digital assets. By providing a stable unit of value, stablecoins enable DeFi platforms to offer users access to a wide range of financial services without exposure to the volatility of traditional digital currencies.

The stablecoin market encompasses various types of stablecoins, including fiat-backed stablecoins, crypto-backed stablecoins, and algorithmic stablecoins. Fiat-backed stablecoins are pegged to fiat currencies held in reserve accounts, ensuring a 1:1 parity between the stablecoin's value and the underlying asset. Digital-backed stablecoins collateralize their value with other digital tokens, while algorithmic stablecoins use smart contracts and algorithmic mechanisms to maintain price stability.

Despite their benefits, stablecoins also face regulatory scrutiny and operational risks. Regulatory concerns primarily revolve around issues such as compliance with anti-money laundering (AML) and know-your-customer (KYC) regulations, as well as the potential systemic risks posed by stablecoin issuers in ensuring the collateral backing the stablecoin.

2.1 Growing usage of stablecoins

Stablecoins have witnessed a remarkable surge in adoption, emerging as a vital component of the digital asset landscape. Although their usage compared to fiat currency remains small. Stablecoins designed to maintain a stable value relative to a reference asset like fiat currency or commodities, are gaining traction due to their stability and versatility. With advantages such as price predictability, transaction efficiency, and risk management capabilities, stablecoins are increasingly being utilized for various purposes beyond reference for digital assets. The uses range from facilitating international payments and remittances to serving as collateral for decentralized finance (DeFi) platforms, stablecoins are proving to be reliable and accessible instruments in the ever-expanding realm of digital finance. Some of the uses of stablecoins are:

- Visa has partnered with Circle to enable merchants to accept USDC payments.
- Mastercard has partnered with Gemini to enable merchants to accept Gemini Dollar payments.
- Microsoft accepts stablecoins, for certain purchases.
- Starbucks allow customers to pay with stablecoins, through the Starbucks app.
- Expedia allows customers to book travel stablecoins.
- Overstock a major retailer accepts stablecoins.
- Shopify allows merchants to accept stablecoins, through its payment gateway.

3. Ensuring Adequate Reserves: Stablecoin Stability

Ensuring an adequate level of reserves is paramount for stablecoins to maintain their pegged value to fiat currency or commodities like gold. Typically, stablecoins achieve this stability by holding reserves in the form of the pegged currency or other assets, such as short-term government securities or cash equivalents, in reserve accounts. However, if a stablecoin issuer lacks sufficient reserves to cover the circulating supply, it can raise concerns about the stability and solvency of the stablecoin.

Insufficient reserves can lead to situations where the stablecoin deviates from its intended value, resulting in volatility and potential losses for holders. Many existing stablecoins, including the top market leaders, face potential risks due to the lack of transparency regarding their reserves and the ability to quickly liquidate non-cash securities in the event of a redemption "run." Other common issues include:

- Lack of Transparency: Many stablecoin issuers do not provide sufficient information about the composition, quality, and sufficiency of their reserves, making it challenging for users to assess the stability and reliability of the stablecoin.

- Audit and Verification: It is often unclear whether the reserve holdings of stablecoins have been audited by independent third parties and when they audited the audits are based on management reporting not the actual existence of the reserves. The absence of real time on-chain verification raises doubts about the accuracy and legitimacy of the reserve assets claimed to back the stablecoins.
- Reserve Composition: The composition of reserves backing stablecoins can also be a point of concern. Some stablecoins hold heterogeneous portfolios of assets, including reverse repos, debt securities, and cash equivalents. This raises issue of convertibility and liquidity to the underlying asset.
- Frequency of Reporting: While some stablecoins provide daily or monthly reports on their reserves, others disclose information less frequently, such as quarterly or semi-annually. The lack of real time on-chain reporting can hinder transparency and make it difficult for users to stay informed about the backing assets.
- Bank Grade: **A prevalent challenge in the stablecoin ecosystem lies in the inability of many issuers to provide what can be termed as "bank-grade" stablecoins.** Unlike traditional financial institutions, these issuers often lack the comprehensive understanding of compliance, fiduciary responsibilities, and reporting obligations prevalent in regulated environments. Consequently, they struggle to uphold the rigorous standards necessary for maintaining reserve holdings—a fundamental requirement for stablecoin stability. This deficiency not only exposes stablecoin holders to potential risks but also undermines the credibility of the stablecoin itself. Without adherence to regulatory standards and robust reserve management practices akin to those of traditional banks, the stability and reliability of such stablecoins remain uncertain.

4. Royal Investment Bank Group

The Royal Investment Bank Group (“Royal Investment Bank Group”) comprises regulated entities that offer a wide range of services, including:

i. A fully integrated and regulated investment bank (license number 220147B1) that is based in Labuan, Malaysia, and governed by the Labuan Financial Services Authority (“LFSA”) authorized to provide a range of investment and ancillary services, including:

    - The business of providing credit facilities

- The business of providing consultancy and advisory services relating to corporate and investment matters including dealing in securities, or making and managing investments on behalf of any person
- The business of undertaking foreign exchange transactions, interest rate swaps, dealings in derivative instruments or derivative financial instruments or any other similar risk management activities
- Labuan Islamic investment banking business
- Labuan financial business.
- Other business as Labuan FSA may specify, with the approval of the Minister of Finance, in any currency (including in Malaysian Ringgit were permitted by the Financial Services Act 2013 or such other relevant law in force).

ii. Stablecoin technology development in partnership with MaalChain DLT team of Tijarah Holding Ltd. which is registered as an Islamic Digital Asset Service Provider in Labuan regulated by the LFSA, to provide the following regulated services:

- Development of blockchain technology solutions.
- Development of smart contracts and other technical framework
- Smart contract audits and security implementation

Royal Investment Bank Group in partnership with MaalChain DLT team builds open, secure, and institutional-grade frameworks and models for digital assets such as stablecoin operations, underpinned by banking class security and full regulatory compliance.

iii. Remittance activities and dealing in digital assets Royal Investment Bank Group has partnered with GC Global Finance Ltd. which is registered as a Money Services Business in Canada under the supervision of FINTRAC, to provide the following regulated services:

- Foreign exchange dealing
- Money transferring
- Dealing in virtual currencies
- Payment service provider

iv. Trading in digital assets Royal Investment Bank Group subsidiary entity Darlitana UAB that is registered as a "Virtual Asset Exchange Operator and Virtual Asset Wallet Operator" in Lithuania under the supervision of the Financial Crime Investigation Services ("FCIS"), authorized to provide the following regulated services:

- Exchange digital asset to digital asset.
- Exchange digital asset to fiat and fiat to digital asset.
- Storage digital asset on behalf of the users.
- Informational services on the balance.
- Send digital asset to the 3rd party on behalf of the client.
- Staking.
- Fiat storage and Exchange.
- Initial Exchange Offering/ Initial Coin Offering.

Based on this observation, along with its licenses and technology partnerships, and its unique position bridging Capital Markets and Digital Assets Markets, Royal Investment Bank Group is dedicated to offering the digital economy a regulated and banking-grade stablecoin.

5. Royal Euro Stablecoin

Existing stablecoins face numerous disadvantages related to their reserves and transparency, highlighting the need for a solution like the Royal Euro (Royal Euro) stablecoin. The transparency and frequency of reporting on reserves varies among stablecoins, hindering information about proof of reserves. In addition, existing stablecoins may face liquidity constraints or time delays in meeting redemption requests, particularly during periods of market stress. These challenges underscore the importance of a stablecoin solution like the Royal Euro, which addresses these shortcomings by providing bank-grade proof of reserves that are on-chain real time verifiable.

The Royal Euro introduces a groundbreaking evolution in the stablecoin landscape, surpassing conventional fiat-backing to embrace the concept of fiat-guarantee. This transformative approach ensures that this stablecoin isn't merely supported by fiat reserves but is fortified by the unwavering assurance of a banking institution, backed by robust risk management protocols and risk-averse practices. This pivotal shift fundamentally enhances the security and reliability of stablecoins, fostering confidence among stakeholders through the endorsement of a trusted banking entity.

Operating within a meticulous asset segregation framework, the Royal Euro ensures the complete separation of assets from the activities of the Royal Investment Bank Group. This segregation is rigorously managed through Verified Reserve Fund Deployment overseen by tier one banks, guaranteeing transparency and offering direct recourse for holders. Unlike many stablecoins reliant solely on issuer testament statements, the Royal Euro implements a resilient proof-of-reserves mechanism, leveraging Decentralized Oracle Nodes for verification. Euro cash reserves are maintained at an 8-10% over-collateralization, enabling the minting of Royal Euro stablecoins at a 1:1 ratio and ensuring a perpetual 100% collateralization ratio.

In essence, the Royal Euro stablecoin, developed by the Royal Investment Bank Group, addresses critical gaps in the existing stablecoin market, particularly concerning proof of reserves. Positioned as a high-quality stablecoin, the Royal Euro serves as a reliable asset for backing other stablecoins and facilitating various on-chain transactions.

Beyond traditional digital asset exchanges, the Royal Euro is designed to cater to wholesale processes, serving as a robust settlement asset for on-chain transactions, an innovative solution for corporate treasury and cash management activities, and a tool for liquidity funding and refinancing solutions. With its banking-grade quality, the Royal Euro is positioned to facilitate atomic on-chain settlement and payment solutions in the digital asset ecosystem, including compliance with security token regulations. This pioneering project aligns with Royal Investment Bank Group's commitment to providing innovative settlement and cash management solutions for institutional clients, marking a significant advancement in the stablecoin landscape.

Section 2 | Royal Euro Stablecoin:

Foundational Elements

1. Overview

This section of the Royal Euro (symbol: REUR) White Paper aims to offer a comprehensive overview of the key elements involved in minting/issuing, distributing, and managing the Royal Euro stablecoin. Additionally, it delves into the core identity and vision of Royal Investment Bank Group ("RIBG"), which prioritizes real-time verification, transparency, compliance, and legal certainty in the utilization of Royal Euro.

The Royal Euro is a stablecoin pegged to the Euro. The Euro cash reserves are maintained at 8-10% over-collateralization, enabling the minting of Royal Euro stablecoins at a 1:1 ratio and ensuring a perpetual 100% collateralization. This fiat-guarantee collateral is deposited by the Royal Investment Bank Group into top-tier 1 international banks such as Deutsche Bank, HSBC, and Barclays through a Verified Reserve Fund Deployment. Ensuring unprecedented legal protection and transparency in the stablecoin's cash collateral for holders of the stablecoin. Importantly, the Royal Investment Bank Group cannot access the Euro cash reserves until confirmation is received from the banks that the Royal Euro stablecoins have been burnt.

Once the Euro fiat currency is deposited into the bank account and access blocked by the bank, then an equivalent number of Royal Euro will be minted on a 1:1 basis and stored in a Royal Investment Bank Group treasury wallet. The Royal Euro stablecoins minted is available on the ledger on the blockchain with decentralized oracle networks s providing additional verification of the information.

The distribution of the Royal Euro will be carried out through compliance-approved holders via over the counter ("OTC") transactions or by listing on approved digital centralized exchanges across various blockchains. Upon distribution, the funds received will be meticulously managed by the RIBG to ensure prudent financial oversight and stability.

Royal Euro as a bank-grade stablecoin, offers the option to act as collateral for minting other stablecoins. The process would involve transferring the required amount of Royal Euros from the RIBG treasury wallet to a designated address that serves as collateral for the stablecoin to be issued. The proof of reserves is readily verifiable in real-time using Web3 infrastructure. This approach instills confidence in holders of the new stablecoin regarding collateral backing, as they have unparalleled access to real-time information concerning the collateral supporting the stablecoins.

Royal Euro will initially be issued on Ethereum and MaalChain blockchains with smart contract addresses of:

Blockchain	Address
Ethereum	https://etherscan.io/address/0x46cc498404afb0cf5d5496cdae1ced62b8a048b2
MaalChain	https://maalscan.io/address/0x165787Adc341F48BFf1baf07af60389daecf8DFf

2. Legal Structure

Royal Investment Bank Group has been driven by a vision to transcend existing stablecoins and achieve a bank-grade stablecoin by offering more secure and legally binding solutions in developing the Royal Euro stablecoin. This ambitious goal is achieved through:

- Full Segregation of Assets (Euro cash): The assets backing the value of Royal Euro are entirely segregated from RIBG's own assets and activities. RIBG ensures transparency through the Verified Reserve Fund Deployment integrated by a tier-1 bank such as Deutsche Bank, HSBC, or Barclays, under the relevant legal framework. This separation achieved using **Swift MT760 instrument** guarantees that the assets are solely dedicated to their intended purpose of collateral for Royal Euro and will be locked by the bank in an assignable, transferrable, and divisible instrument.
- Direct Holder Recourse: Royal Euro holders have direct recourse on the collateral held through a Verified Reserve Fund Deployment structure using decentralized oracle nodes. This crucial feature distinguishes Royal Euro stablecoin from many others, where "real-time" information on the reserves, legal structure, and holder recourse is often lacking. The transparent approach of Royal Euro delivers enhanced trust and confidence for holders. In the event of circumstances that threaten the stability mechanisms of the stablecoin, the holders of the stablecoin will be recognized as beneficiaries of the fiduciary structure. Consequently, they will have recourse on the collateral assets to protect them from such situations.
- Moreover, RIBG will ensure compliance with the applicable regulatory framework by whitelisting any address eligible to receive stablecoins using OTC platforms. The Royal Euro, backed by tier-1 banks for collateral and fortified with Multi-Party Computation security, offers holders greater protection against crypto theft and cyber-hacks compared to other stablecoins. As the digital assets landscape evolves, the Verified Reserve Fund Deployment structure remains adaptable, guaranteeing

continued protection for stablecoin holders while adapting to changing regulatory requirements and technological advancements.

3. Collateral Structure

In our undertaking for innovative stablecoin solutions, RIBG has forged strategic partnerships with renowned blockchain developers from MaalChain DLT team, top market makers, proof of reserve providers and oracle on/off ramp networks. Together, we harness blockchain technology to revolutionize collateral and proof of reserve management to achieve a bank-grade stablecoin. Embedded in the development of the Royal Euro is cutting-edge proof of reserve solutions, marked by heightened security and an efficient mechanism to maintain a stable binding with Euro fiat currency. Additionally, our approach ensures real-time transparency of collateral assets and offers exceptional liquidity for on/off-ramp transactions. We firmly believe that these attributes set the Royal Euro apart, making it unparalleled among existing stablecoins.

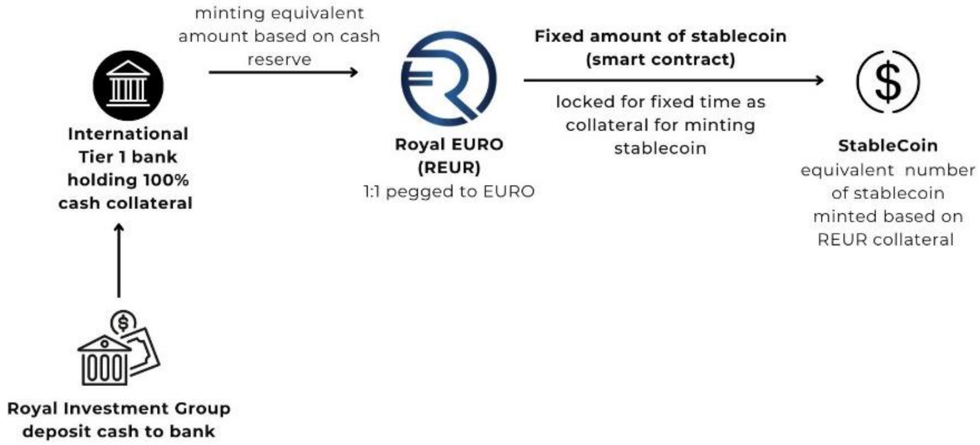
In the landscape of stablecoins, validating proof of reserves presents a significant obstacle, often reliant on issuer-provided statements. Auditors, in many instances, merely authenticate the issuer's claims without independently verifying the reserves. The Royal Investment Bank Group addresses this issue by providing real-time verification of collateral through the Verified Reserve Fund Deployment. Unlike other stablecoins that rely on receiving proceeds of the stablecoin sale to develop the reserves, Royal Euro has ready Euro cash reserves to support its minting that will be locked in international tier one banks.

This comprehensive process establishes a unique, clear, secure, and transparent proof of reserves for the Royal Euro stablecoins, ensuring they are issued with 100% Euro cash collateral and do not rely on user funds to develop collateral reserves.

4. Supply Management

Royal Euro marks a significant advancement by addressing a critical deficiency within the stablecoin landscape: the assurance of trust in the collateral backing each minted stablecoin, dynamically verified in real-time. This groundbreaking development addresses a fundamental gap in the market, providing a solution that instills confidence in the real-time collateral for a stablecoin.

Real-time information of the collateral for the Royal Euro stablecoin is obtained using decentralized oracle network. This provides transparency that the collateral is securely held through the Verified Reserve Fund Deployment with a tier-1 bank. The reserves are blocked by tier 1 banks and cannot be accessed by RIBG and allows the minting of Royal Euro stablecoins on a 1:1 ratio with the Euro cash collateral. Additional procedures may be introduced to ensure compliance with new or changes to existing regulations. This innovation enhances trust in Royal Euro stablecoin collateral, underscoring RIBG's commitment to transparency, compliance, and regulatory adherence in a rapidly evolving blockchain landscape in minting Royal Euro stablecoins.



The RIBG's treasury wallet is intricately connected to a server, where the dynamic minting and burning of Royal Dollars occurs under the influence of the CPIR algorithm. Facilitating this linkage are APIs, ensuring seamless integration and 100% collateralization. Key operational smart contract components, fortified with Multi-Party Computation (MPC) capabilities, are deployed to oversee, and manage the supply of Royal Euro including:

- Master Minter: The Master Minter undertakes the initial minting of Royal Euro.
- Minter: Controls the minting of Royal Euro in response to the Euro collateral.
- Burner: Controls the burning of Royal Euro in response to redeeming the Euro collateral.
- Blacklist and Whitelist Management: Allows Externally Owned Addresses (EOAs) that violate regulatory requirements to be blacklisted. This enhances adherence to banking and regulatory compliance standards and increasing the difficulty for cyber criminals to misappropriating Royal Euro. Blacklisted addresses will not be able to transact Royal Euro. EOA's that have meet RIBG's compliance requirements can be Whitelisted to improve interaction speed.

- Rescuer Protocol: An autonomous and specialized protocol is in place to rectify incorrectly sent Royal Euro on the protocol of the blockchain.
- Pauser Protocol: An independent and dedicated protocol as a prudent precaution to halt minting and burning of Royal Euro in an unforeseen circumstance arise that necessitate freezing the minting and burning server. Pausing will not affect the finality of Royal Euro transactions.

5. Distribution of Royal Euro

The Royal Euro is positioned as a bank-grade stablecoin tailored for a diverse range of on-chain Euro-denominated transactions, including staking, collateralization, margining, and cross-border settlements. It is anticipated to streamline settlements and financial transactions, providing a viable alternative to the USD. With its status as a bank-grade stablecoin, it can also function as collateral for backing other stablecoins. Accessible initially for purchase directly from RIBG's OTC platform or approved third-party OTC providers platforms, the Royal Euro may also be listed on approved centralized digital exchanges. Participation in Royal Euro transactions necessitates counterparties to undergo stringent banking and regulatory compliance procedures, encompassing KYC, AML-CFT, and Sanctions-Embargoes checks, ensuring a secure and compliant transaction environment.

Users opting for RIBG's OTC can deposit fiat funds into the designated bank account. Upon successful compliance verification of the user, Royal Euros will then be issued to the user's wallet. The redemption process operates in reverse, with fiat stablecoins being delivered to the designated RIBG wallet thorough accessing an off-ramp maintained by RIBG or a licensed RIBG issuing member. Upon successful validation, Euro funds are transferred to the user's designated bank account.

5.1 Applications of Royal Euro

Royal Euro is meticulously designed to harness both on-chain registration of digital assets and off-chain compliance and operational mechanisms. Aligned with this vision, the Royal Euro, a bank-grade stablecoin, is positioned to facilitate transparency and real-time proof of reserves on-chain, verifiable by decentralized oracle nodes. Its versatility allows it to be employed in financial instruments, trade finance, cross-border settlements, and as an alternative to the USD. Moreover, Royal Euro is expected to serve as a high-quality asset for various on-chain transactions, including CBDC issuance, collateralization, margining, and cross-border settlements.

Royal Euro facilitates faster and more transparent transactions, ensuring a true pegging of Euro fiat currency to the Royal Euro on a 1:1 basis. This minimizes settlement, credit, and counterparty risks, while aiming to combine centralized wisdom with blockchain governance.

To ensure compliance, only addresses whitelisted by RIBG will be eligible to receive Royal Euro. This whitelisting process, based on the MiCA Framework, entails Royal Euro performing compliance controls (KYC, AML-CFT, sanctions, and embargoes) in accordance with banking regulations and policies, and duly onboarding the owner of such addresses. RIBG will provide a liquidity service for Royal Euro, allowing holders to easily sell their tokens to the bank under normal market conditions, with normal functioning IT systems, and on a non-commitment basis. Under such conditions, transactions will be conducted within a week and at no cost, provided that all identification obligations are satisfied.

Royal Investment Bank Group is committed to providing users with a secure environment, adhering to the world's best KYC, AML-CFT, sanctions, and embargoes policies. This ensures an additional layer of security for users, protecting them against cybercrime and unauthorized stablecoin use.

5.2 Availability on blockchains

Royal Euro access through multiple public blockchains, the initial blockchains are MaalChain and Ethereum.

Appendix I: Disclaimer and Risk Warning

This whitepaper serves to outline the principal risks associated with the Royal Euro stablecoin ("Royal Euro") issued by Royal Investment Bank Group ("Issuer") and recorded via distributed ledger technology. It is not exhaustive in its coverage of risks.

Potential holders of stablecoins are urged to carefully review the documentation associated with the Royal Euro stablecoin, considering any associated risk factors, and consult with their own professional advisors to determine the suitability of acquiring this asset based on their individual circumstances.

- Prospective purchasers are responsible for assessing the suitability of their acquisition based on their individual circumstances. Specifically, they may wish to consider, either independently or with the guidance of professional advisors:
- Their level of knowledge and experience in conducting a comprehensive evaluation of the Royal Euro and the associated fiduciary structure.
- Whether they possess the necessary access to, and familiarity with, appropriate analytical tools to assess the purchase of Royal Euro within the context of their specific situation.
- Their financial resources and liquidity to manage all risks associated with holding Royal Euro.
- A thorough understanding of the terms governing the Royal Euro and the underlying fiduciary structure.
- Their ability to assess potential scenarios involving economic, interest rate, and other factors that could impact their purchase and capacity to withstand associated risks.

Before considering an investment in the digital assets offered by Royal Investment Bank Group, prospective subscribers should evaluate whether such an investment aligns with their unique investment goals, financial circumstances, and objectives. They are encouraged to seek advice from the appropriate legal professional, tax/accounting professional, and financial advisor.

This whitepaper does not constitute financial product or investment advice. It does not consider the investment objectives, financial situation, or specific needs of any reader or subscriber.

This whitepaper and any associated documents do not serve as the basis for any credit or other evaluation and should not be construed as a recommendation, opinion statement, or report by the Issuer. Receipt of these documents or any related information should not be interpreted as a recommendation regarding Royal Euro. Prospective purchasers are advised to conduct their own independent investigations into the financial conditions and affairs of the Issuer, the Royal Euro, and the associated fiduciary structure. This whitepaper, nor any other information provided in connection with the Royal Euro, constitutes an offer or invitation by or on behalf of the Issuer to subscribe for or purchase any Royal Euro.

Royal Investment Bank Group does not give legal or tax advice to the purchasers. Each prospective purchaser should consult its own advisers as to legal, tax, and regulatory aspects relating to a purchase of Royal Euro and the fiduciary structure.

Potential purchasers and sellers of the Royal Euro should be aware that they may be required to pay taxes or documentary charges or duties in accordance with the laws and practices of the jurisdiction to which the Royal Euro is transferred or other jurisdictions. In some jurisdictions, no official statements of the tax authorities or court decisions may be available in relation to the tax treatment of assets such as the Royal Euro. It is incumbent on prospective purchasers to seek their own tax advice on their individual taxation with respect to the acquisition, holding, disposal, and cancellation of the Royal Euro. Only such an adviser can duly consider the specific situation of the prospective purchaser.

This whitepaper does not constitute an offer to sell or the solicitation of an offer to buy any Royal Euro in any jurisdiction to any person to whom it is unlawful to make the offer or solicitation in such jurisdiction. The sale of Royal Euro may be restricted by law in certain jurisdictions. The Issuer does not represent that this whitepaper may be lawfully distributed or that any Royal Euro may be lawfully offered in compliance with any applicable registration or other requirements in any such jurisdiction or pursuant to an exemption available thereunder or assume any responsibility for facilitating any such distribution or offering.

The Royal Investment Bank Group does not have nor assume responsibility for the lawfulness of the acquisition of the Royal Euro by a prospective purchaser of the Royal Euro, whether under the laws of the jurisdiction of its incorporation or the jurisdiction in which it operates (if different), or for compliance by that prospective purchaser with any law, regulation, or regulatory policy applicable to it.

This whitepaper does not constitute an offer of Royal Euro for sale in the United States or any jurisdiction where such offer may be unlawful. The Royal Euro may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, as defined: (i) in Regulation S under the Securities Act, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act; (ii) for the purposes of the United States Commodity Exchange Act of 1936, as amended (the CEA) or any Commodity Futures Trading Commission (CFTC) Rule, guidance or order proposed or issued under the CEA (for clarity, any individual not meeting the definition of "Non-United States person" as defined under CFTC Rule 4.7(a)(1)(iv), with the exception of qualified eligible persons not falling under "Non-United States persons" as specified in subsection (D) thereof, shall be deemed a U.S. person); or (iii) for purposes of the final rules implementing the credit risk retention requirements of Section 15G of the U.S. Securities Exchange Act of 1934, as amended.

Royal Investment Bank Group, its subsidiaries, affiliates, as well as the directors, employees, agents, representatives, or advisers of any such entities, and any other party, explicitly disclaim any liability for losses arising from the use of this white paper, its contents, or any matters related to it. This includes, but is not limited to, liability arising from negligence, fault, or any other cause.

This white paper, in its entirety or any part thereof, may not be reproduced, redistributed, directly or indirectly shared with any other individual, or published for any purpose without prior written consent from Royal Investment Bank Group. The content within this white paper is provided for informational purposes only and should not be construed as an offer, invitation, or recommendation for the subscription, purchase, or acquisition of digital assets issued by Royal Investment Bank Group. The white paper and its contents do not form the basis of any contractual agreement or commitment.

Appendix II - References

BDO, I. S. (31 January 2024). *Independent Auditors' Report on the Consolidated Reserves Report.* RC134792023BD0684 BDO.

Bitpay. (2023, September 22). *Guide to Stablecoins: What They Are, How They Work and How to Use Them*. Retrieved from https://bitpay.com/blog/guide-to-stablecoins/#:~:text=How%20many%20stablecoins%20are%20there,billion%20as%20of%20June%202022.

BlackRock Funds. (September 29, 2023). *Circle Reserve Fund .*

Browne, R. (2022, May 12). *The world's biggest stablecoin has dropped below its $1 peg*. Retrieved from https://www.cnbc.com/2022/05/12/tether-usdt-stablecoin-drops-below-1-peg.html

Coingecko. (2024, February 12). *Tether USDT Price*. Retrieved from https://www.coingecko.com/en/coins/tether

FasterCapital. (2023, December 22). *Price pegging: The Mechanism Behind Tether USDT's Price Pegging*. Retrieved from https://fastercapital.com/content/Price-pegging--The-Mechanism-Behind-Tether-USDT-s-Price-Pegging.html#Understanding-Price-Pegging

Kosse, A., Glowka, M., & Mattei, I. (November 2023). *BIS Papers No 141.* Monetary and Economic Department.

Newmyer, T. (2021, September 9). *SEC's Gary Gensler likens stablecoins to 'poker chips' amid call for tougher crypto regulation*. Retrieved from https://www.washingtonpost.com/business/2021/09/21/sec-gensler-crypto-stablecoins (last visited Aug. 16, 2023).

Nikhilesh, D. (2023, March 13). *USDC Stablecoin Regains Dollar Peg After Silicon Valley Bank-Induced Chaos*. Retrieved from https://www.coindesk.com/business/2023/03/13/usdc-stablecoin-regains-dollar-peg-after-silicon-valley-bank-induced-chaos/

Official Journal of the European Union. (2023, June 9). *Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets.* Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R1114

RIBK. (2024). *License*. Retrieved from https://www.ribk.com.my/en/about-us/

Tether Holding Limited. (2023, December 31). *Transparency*. Retrieved from https://tether.to/en/transparency/#reports