BDACS

2025

KRW1

PROOF-OF-CONCEPT

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EXECUTIVE SUMMARY

The demand for fiat-denominated digital assets continues to accelerate in today's fast-paced digital economy. Yet most of the global stablecoin volume remains tied to the U.S. dollar, resulting in an underrepresentation of key sovereign currencies in the programmable finance ecosystem. KRW1 seeks to close this gap.

KRW1 is a fully backed Korean Won (KRW) stablecoin developed by BDACS, Korea's leading, fully regulated digital asset custodian. KRW1 is designed as a technological and regulatory proof-of-concept, created to demonstrate the infrastructure readiness of the Korean digital asset sector, while also supporting the country's financial innovation agenda ahead of the anticipated passage of the Digital Asset Basic Act.

KRW1 maintains a 1:1 reserve ratio with the Korean Won, backed by fiat reserves, and held in a segregated account within a Tier-1 Korean commercial bank. It is governed by a comprehensive risk, compliance, and audit framework integrating real-time reserve verification, periodic attestations (as defined by regulatory requirements), and will be subject to annual third-party audits once KRW1 transitions from proof-of-concept to commercial use. This framework ensures robust user protection, transparent governance, and secure value alignment between the digital asset and its fiat counterpart.

The Korean market, recognized for its advanced financial infrastructure and active digital asset participation, processed over ₩57 trillion (approx. US$41 billion) in domestic and cross-border stablecoin transactions in Q1 2025 alone. Simultaneously, Asia-Pacific cross-border stablecoin flows exceeded US$500 billion in 2024. KRW1 aims to enhance this evolving ecosystem by enabling secure, low-latency, and locally compliant value transfer utilizing Korean Won, an asset increasingly demanded by domestic and international stakeholders.

Technologically, KRW1 is built to operate across multiple blockchains, including those compatible with EVM, incorporating built-in interoperability modules and dual-environment issuance. These systems enable deployment on public networks and permissioned ledgers, while maintaining wallet-level compliance control and seamless reserve reconciliation with core banking systems.

To be clear, this proof-of-concept phase is not a commercial launch. The deployment of KRW1 is designed strictly to demonstrate feasibility, infrastructure integrity, and regulatory alignment. It signals BDACS's readiness to support the full lifecycle of sovereign-denominated stablecoins, in partnership with Korea's banking sector, and in anticipation of formal stablecoin legislation.

KRW1 will offer a new standard for fiat-based digital assets in Korea by combining institutional-grade custody, blockchain-native functionality, and real-time regulatory observability. KRW1 also positions

BDACS and Korea at the forefront of compliant, scalable, and sovereign-aligned stablecoin innovation, and lays the foundation for future commercial deployment and broader financial transformation with the expected enactment of the Digital Asset Basic Act.

INTRODUCTION

Stablecoins have rapidly evolved into core infrastructure for global digital finance, reflecting strong demand for fiat-linked instruments and stable value. Framing this evolution is key to understanding Korea's emerging role, and more importantly, why the Korean Won's digital representation stands at the center of the next phase of stablecoin development.

US 41B (₩57 Trillion)
KOREAN STABLECOIN TRANSACTIONS (2024)

US 500B (₩695 Trillion)
ASIA-PACIFIC STABLECOIN TRANSACTIONS (2024)

US 8,000B (₩11,112 Trillion)
GLOBAL STABLECOIN TRANSACTIONS (2024)

2.1 Global Stablecoin Evolution

Since their emergence in the mid-2010s, stablecoins have evolved from niche instruments into foundational infrastructure within the digital asset ecosystem. Conceived initially as a bridge between the traditional volatility of cryptocurrencies and the welcomed predictability of fiat currencies, stablecoins now serve as a critical underpinning in several applications, from centralized exchange liquidity, decentralized finance (DeFi), remittances, payment gateways, settlement systems, and tokenized financial products.

The global market capitalization of fiat-backed stablecoins exceeded US$130 billion in 2025, with transaction volumes crossing US$8 trillion annually. This scale underscores their function as programmable, borderless representations of sovereign currency, trusted by retail and institutional actors across diverse geographies. However, an overwhelming majority of this growth remains concentrated in assets tied to the U.S. dollar, reflecting the USD's formidable reserve currency status and recent, ongoing regulatory clarity within U.S. dollar jurisdictions.

2.2 Limitations of USD-Dominant Models

While USD-based stablecoins offer global reach, their dominance creates several structural dependencies:

- **Foreign Exchange Risk**: When using USD tokens in domestic (*i.e.*, Korea) and regional (*e.g.*, Asia Pacific) contexts, non-U.S. users are exposed to FX volatility.
- **Monetary Asymmetry**: Sovereign nations lose direct monetary expression and control in digital ecosystems dominated by foreign-denominated tokens.
- **Regulatory Friction**: Using non-local currencies in regulated environments often triggers additional compliance requirements and/or legal uncertainties.

Consequently, financial markets across Asia, Europe, and the Middle East are increasingly exploring fiat-native stablecoins to regain monetary alignment within their respective digital financial infrastructure. Korea is no exemption.

2.3 Strategic Importance of KRW Representation

Korea's economy is digitally sophisticated, globally connected, and domestically driven. It has one of the world's most active digital asset markets by volume, a highly automated financial sector, and a regulatory framework that is beginning to actively support virtual asset innovation while still ensuring strong user protection. Still, the Korean Won does not exist in a digital tokenized form.
This absence both reveals a concerning gap, and a strategic opportunity. A compliant, fiat-backed KRW stablecoin can:

- Enhance capital efficiency for Korean domestic payments, treasury, and intercompany settlements.
- Reduce foreign exchange reliance and leakage in cross-border flows.
- Promote KRW as a digital medium of exchange within Korea’s regional and global trading and tourism corridors.
- Reinforce Korea's monetary sovereignty in emerging digital payment systems.
- Enable the expansion of the Korean digital asset ecosystem as a native settlement token for digital assets, including cryptocurrencies, STOs, NFTs, and RWAs.

Korea processed an estimated ₩57 trillion (approximately US$41 billion) in domestic stablecoin transactions in Q1 2025 using USD-denominated stablecoins. Meanwhile, Asia-Pacific cross-border stablecoin flows reached US$519 billion in 2024, utilizing USD-denominated stablecoins. These figures emphasize the growing opportunity and need for a sovereign-backed Korean digital asset.

2.4 BDACS Vision and Objectives

BDACS (Beyond Digital Asset Custody Service) is Korea's leading VASP-licensed digital asset custodian. With deep-rooted capabilities in secure custody, institutional finance, and blockchain compliance, BDACS is uniquely positioned to issue and manage KRW1 as a digital representation of Korean fiat.

At this stage, KRW1 is not intended for release as a commercial stablecoin. Alternatively, BDACS is executing a proof-of-concept initiative that validates the technical, operational, and regulatory foundations required for a fully compliant KRW-denominated digital asset. This includes integrated

issuance and redemption workflows, reserve segregation, multi-chain deployments, and wallet-level compliance enforcement—all aligned with Korea's evolving regulatory posture and forthcoming Digital Asset Basic Act.

BDACS envisions KRW1 as an institutional-grade building block for Korea's next-generation financial systems, anchored in user protection, security, compliance, enabled by blockchain, and open to domestic and global integration. KRW1 is designed to be fully backed by the Korean Won to always remain redeemable 1:1 for the Korean Won. KRW1 reserves are held in the custody and management of a leading T1 Korean commercial bank. Planned monthly reserve attestations will provide assurance and confirmation that Korean Won reserves are greater than the amount of KRW1 in circulation each month.

BDACS

BDACS is a premier digital asset prime services platform built for institutional clients. By leveraging advanced custody infrastructure, BDACS delivers comprehensive prime custody offerings that include multi-asset custody, global market access, staking, lending, escrow, and institutional-grade reporting.

Through strategic partnerships with leading institutions such as Galaxy Digital and Woori Bank, BDACS provides a secure, fully compliant, and trusted infrastructure that is setting the standard for institutional engagement in digital assets in Korea and beyond.

MARKET LANDSCAPE & DEMAND DRIVERS

Korea and the Asia Pacific digital asset sector is experiencing rapid momentum, with retail adoption, institutional uptake, and cross-border flows converging to form one of the world's most dynamic markets. Understanding this landscape is critical to contextualize the demand drivers that shape domestic and regional opportunities for stablecoins, and more specifically, KRW-denominated stablecoins.

3.1 Domestic and Asia-Pacific Market Data

Korea's digital asset market continues to evolve rapidly. By the end of 2024, retail digital asset holdings rose to approximately ₩104 trillion (around US$80 billion), which is equivalent to roughly 5% of Korea's GDP. In Q1 of 2025 alone, stablecoin transaction volumes in Korea surged to ₩57 trillion (about US$41 billion), driven primarily by dominant USD pegged assets. Remarkably, these volumes have tripled since Q3 of 2024.

Global analysts also note a broader Asia Pacific based trend. Cross-border stablecoin flows amounted to over US$500 billion in 2024, solidifying this region as one of the most globally significant cross-border stablecoin corridors. Meanwhile, in Korea, the USD-denominated stablecoin market in Korea amassed a transaction volume of US$60 billion in the first half of 2025.

Digital asset adoption is widespread. More than a quarter of Korea's population now invests in digital assets regularly. Additionally, more than 16 million residents, nearly one-third of the population, hold accounts on Korean domestic cryptocurrency platforms. These figures reflect both deep retail engagement and infrastructural readiness.

3.2 Treasury, Remittance, and K-Culture Demand

Corporations are increasingly exploring stablecoins for treasury and remittance efficiency. B2B usage has surged, especially stablecoin-funded card transactions, reflecting expanding operational use outside traditional crypto arenas. In the broader Asia Pacific region, cross-border payments remain a primary growth driver for stablecoins, propelled by speed, cost-efficiency, and availability. Tourism, particularly linked to medical tourism, K-Culture, and microeconomies (*e.g.*, events, entertainment) continue to emerge as potential domestic demand vectors, though quantifiable data remains nascent.

3.3 Competitive Landscape Analysis

Domestic financial institutions are responding rapidly. Nine major commercial and online banks, including KB Kookmin and Toss, have announced their intentions to launch KRW pegged stablecoins. Meanwhile, USD pegged stablecoins (like USDT and USDC) still dominate trading volume, but their prevalence has sparked policy concerns regarding foreign-currency dependence and financial autonomy. Blockchain infrastructure providers report that stablecoins now power nearly half of all transaction volume, reinforcing their structural importance in modern payments.

REGULATORY AND COMPLIANCE CONTEXT

Korea's digital asset regulatory landscape is entering a decisive phase, marked by the convergence of domestic legislation, supervisory guidance, and global standard-setting. Central to this evolution are the forthcoming amendments under the Virtual Asset User Protection Act, the enactment of the Digital Asset Basic Act (DABA), and Korea's efforts to align with international frameworks such as the GENIUS Act, FATF recommendations, and the EU's MiCA regime. Collectively, these developments aim not only to formalize licensing, issuance, and reserve requirements for stablecoin issuers, but also to position Korea as a global leader in regulatory clarity and cross-border interoperability.

4.1 Korean Regulatory Evolution (2024–2026)

Korea is rapidly advancing its regulatory framework for digital assets, driven by legislative and regulatory bodies, which include the Financial Services Commission (FSC), the Financial Supervisory Service (FSS), and the Bank of Korea (BOK).

Similarly, the Digital Asset Basic Act (DABA), proposed under the President Lee Jae-Myung's Administration, is set to codify a broader legal structure consolidating prior regulations. It introduces expanding the licensing regime for Virtual Asset Service Providers (VASPs), including stablecoin issuers. Additionally, the DABA prescribes rigorous reserve, audit, and custody requirements for KRW-denominated stablecoins. The DABA is expected to be enacted by Q4 2025, with implementation commencing in 2026.

Meanwhile, the BOK has voiced caution over the rapid adoption of non-bank-issued stablecoins and warns of potential risks to monetary policy and capital stability. BOK recommends a phased rollout, commencing with the utilization of tightly regulated commercial banks, before expanding to broader sectors, among other recommendations.

4.2 Digital Asset Basic Act (Preview & Implications)

The Digital Asset Basic Act (DABA) is expected to establish the legal and regulatory foundation for Korea's impending digital asset framework. Key implications include:

- **Licensing and Issuance**: Digital asset entities, including stablecoin issuers, will require formal licenses and must meet eligibility thresholds (*e.g.*, minimum paid-in capital).
- **Collateral and Custody**: KRW-denominated stablecoins must maintain full fiat backing, held in bankruptcy-remote bank accounts. Periodic third-party audits are mandatory, ensuring transparency and mitigating credit risk.
- **Regulatory Oversight**: KRW-denominated stablecoin issuers fall under primary FSC supervision, with the FSS and BOK sharing oversight, especially concerning systemic risk and other monetary policy impacts. A self-regulatory body, envisioned as the Korea Digital Asset Industry Association, may also be created to conduct token reviews and enforce disclosures.

Once enacted, the DABA is expected to modernize Korea's digital asset landscape and position it as a premier regulatory model across Asia.

4.3 GENIUS Act and Private Sector Enablement

U.S. legislation, particularly the GENIUS Act of 2025, strongly influenced Korea's regulatory efforts and established a bank-like regulatory framework for payment stablecoins, setting requirements for issuer registration, reserve standards, and AML/CFT compliance. The Korean government has cited the GENIUS Act as a benchmark for integrating similar requirements – including KYC, audits, reserve disclosures, and risk controls—into its own legislative agenda.

4.4 Global Regulatory Alignment (FATF, SEC, IOSCO)

In addition to national developments, Korea is working to align its regulatory framework with existing global standards. The FSC and related bodies have considered the following frameworks:

- FATF recommendations, including travel rule enforcement and AML/CFT compliance.
- EU's MiCA Regulation, which has been in effect since mid-2024, covers e-money and asset-backed tokens.
- U.S. supervisory models stemming from FINCEN, SEC, and the GENIUS Act.

These global frameworks ensure the Korean regulatory approach remains interoperable with international jurisdictions, enabling seamless cross-border compliance and standardization.

TECHNOLOGY & ARCHITECTURE

The KRW1 proof-of-concept architecture is designed to validate the core infrastructure needed for a fully compliant Korean Won based stablecoin ecosystem. The system supports both public and permissioned deployments, integrates with existing banking infrastructure, and maintains strict reserve and compliance controls at the wallet level. This approach ensures flexibility for regulators, institutional partners, financial institutions, and retail users while also preserving blockchain-native transparency and auditability.

5.1 Multi-Chain Deployment Model

KRW1 is built to operate across multiple blockchain environments, including Ethereum Virtual Machine (EVM)-compatible chains. KRW1 can be deployed on public Layer 1 networks, permissioned institutional chains, and secure interoperable bridges. This flexible issuance model supports both open market use cases and regulated institution-specific deployments.

Issuance and redemption mechanisms are orchestrated by backend, regulated infrastructure of BDACS and monitored through automated compliance modules. New tokens are minted only when fiat reserves have been validated and secured, ensuring 1:1 parity. Burn operations are tied to redemption confirmations within BDACS's reserve management ledger.

5.2 Custody Stack: MPC + Cold Wallet Integration

BDACS employs a global-standard, hybrid custody architecture combining:

1. Multi-Party Computation (MPC) key management for secure operational access; and
2. Air-gapped cold wallet segregation for offline storage and compliance-controlled assets.

This dual approach provides both operational flexibility and uncompromising security. MPC ensures that no single party can ever access or compromise token reserves or issuance authority, while cold wallets safeguard long-term holdings in full alignment with segregation requirements between client and issuer funds.

Importantly, the custody technology stack of BDACS is battle-tested, enterprise-grade, and ISMS-certified (including ISO 27001-certified), reflecting the highest standards of security management. Independent third-party cybersecurity firms conduct recurring audits, further validating the robustness of the platform. As a VASP-licensed digital asset custodian in Korea, BDACS is uniquely positioned in the domestic market to deliver this level of regulated, institution-ready infrastructure, a distinction that sets BDACS apart from other potential KRW-denominated stablecoin issuers.

5.3 Compliance Modules and Wallet Control

For the proof-of-concept stage, wallets interacting with KRW1 must be pre-approved and registered through an "allowlist" maintained and controlled by BDACS. This compliance module supports:

- KYC/AML enforcement through off-chain identity verification;
- Automated transaction filtering and monitoring (including, where legally required, the temporary freezing of funds);
- Sanctions and blacklisting controls aligned with FSC as well as Financial Action Task Force (FATF) guidelines.
- Native screening and monitoring with the ability to apply sophisticated, pre-set rules.

These compliance policies are enforced at the smart contract level using upgradable proxy contracts and backend integrations with BDACS's identity verification layer.

5.4 Core Banking & Ledger Integrations

KRW1's backend is built to integrate directly with the core banking systems of a T1 Korean commercial bank. This protocol provides for the real-time updating of reserve accounts and reconciliation with on-chain token issuance.

Banking integration ensures:

- Segregated fiat accounts for collateral holdings
- Real-time inflow and outflow confirmation
- Daily reconciliation between KRW1 supply and fiat reserve balances

The ledger for KRW1, maintained by BDACS, mirrors real-world banking transactions and interfaces with the issuance smart contract through an audited API relay, supporting complete transparency between the digital and fiat layers.

5.5 Interoperability and Cross-Chain Transfers

KRW1 supports cross-chain functionality via established interoperability protocols, including:

- Proprietary capability for secure messaging between blockchain nodes;
- Wrapped token issuance for transfers between EVM chains;
- Compliance bridges which preserve wallet-level KYC status between networks.

Cross-chain support allows KRW1 to be adopted across different blockchain ecosystems without fragmenting regulatory control or compliance standards.

5.6 Token Lifecycle Flow (Issuance to Redemption)

KRW1 is envisioned as a regulatory-first Korean Won-denominated stablecoin, and thus, is designed to follow a strict issuance–redemption–burn process to ensure full collateralization, regulatory compliance, and transparency at every stage.

1. **Onboarding**
   Users are subject to full KYC/AML due diligence in accordance with Korean regulatory standards. Only verified entities are issued allow-listed wallets authorized for minting and redemption.

2. **Deposit**
   Fiat KRW must be deposited into a segregated reserve account at a T1 Korean commercial bank, ensuring strict separation of client funds from BDACS' operating capital.

3. **Issuance**
   Users are subject to full KYC/AML due diligence in accordance with Korean regulatory standards. Only verified entities are issued allow-listed wallets authorized for minting and redemption.

4. **Circulation**
   Upon confirmation from the partner bank, KRW1 tokens are minted on a 1:1 basis and transferred exclusively to the verified allow-listed wallet.

5. **Redemption**
   Authorized KRW1 holders may initiate redemption by transferring tokens to a BDACS-controlled burn address, ensuring complete and irreversible removal from circulation.

6. **Settlement**
   Following redemption, the equivalent fiat Korean Won is released from the segregated reserve account and remitted back to the holder's bank account at par value, in full compliance with settlement requirements.

7. **Audit & Verification**
   Every transaction in the lifecycle is logged, reconciled, and independently attestable, subject to recurring third-party audits and regulatory reporting obligations to preserve systemic integrity and transparency.

This lifecycle framework ensures that KRW1 remains fully backed by segregated fiat reserves, is always redeemable at par, and is structured to meet institutional compliance requirements as it transitions from proof-of-concept to regulated commercial production.

PROOF OF RESERVES AND TRANSPARENCY MECHANISMS

Maintaining a fully backed, transparent, and verifiable reserve is essential to building trust, ensuring regulatory compliance, and heightens user protection. As a regulatory-focused, Korean Won-denominated stablecoin issued by a regulated digital asset custodian, KRW1 guarantees reserve integrity and transparency.

6.1 Reserve Model: 1:1 Backing

KRW1 is structured under a full-reserve model, maintaining a strict one-to-one backing with Korean Won held in segregated accounts. Reserves are held separately from BDACS – the issuer – operating capital and safeguarded under "bankruptcy remoteness" rules, confidently assuring users of redemption at par and minimizing the risk of a "bank-run" scenario.

6.2 Reserve Management (Tier-1 Commercial Bank Custody)

The collateral backing of KRW1 is managed through an institutional-grade custody arrangement utilizing a T1 Korean commercial bank. Reserves are held under robust security measures, ensuring their liquidity, ability to be audited, and compliance with existing reserve segregation standards. Monthly attestations confirm that reserves exceed or are equal to tokens in circulation, with annual independent audits reinforcing accountability.

6.3 Real-Time Verifiability and Attestations

To bolster transparency, KRW1 is subject to real-time reserve verification via secure auditing protocols. These mechanisms provide stakeholders with a live-view capability of reserve levels through public dashboards, reducing information delays and reinforcing trust in solvency.

Real-time proof of reserves has emerged as an industry best practice in order to demonstrate that issued stablecoins remain fully backed by collateral, which supports market confidence and long-term stability.

6.4 Audit Procedures and Open Banking APIs

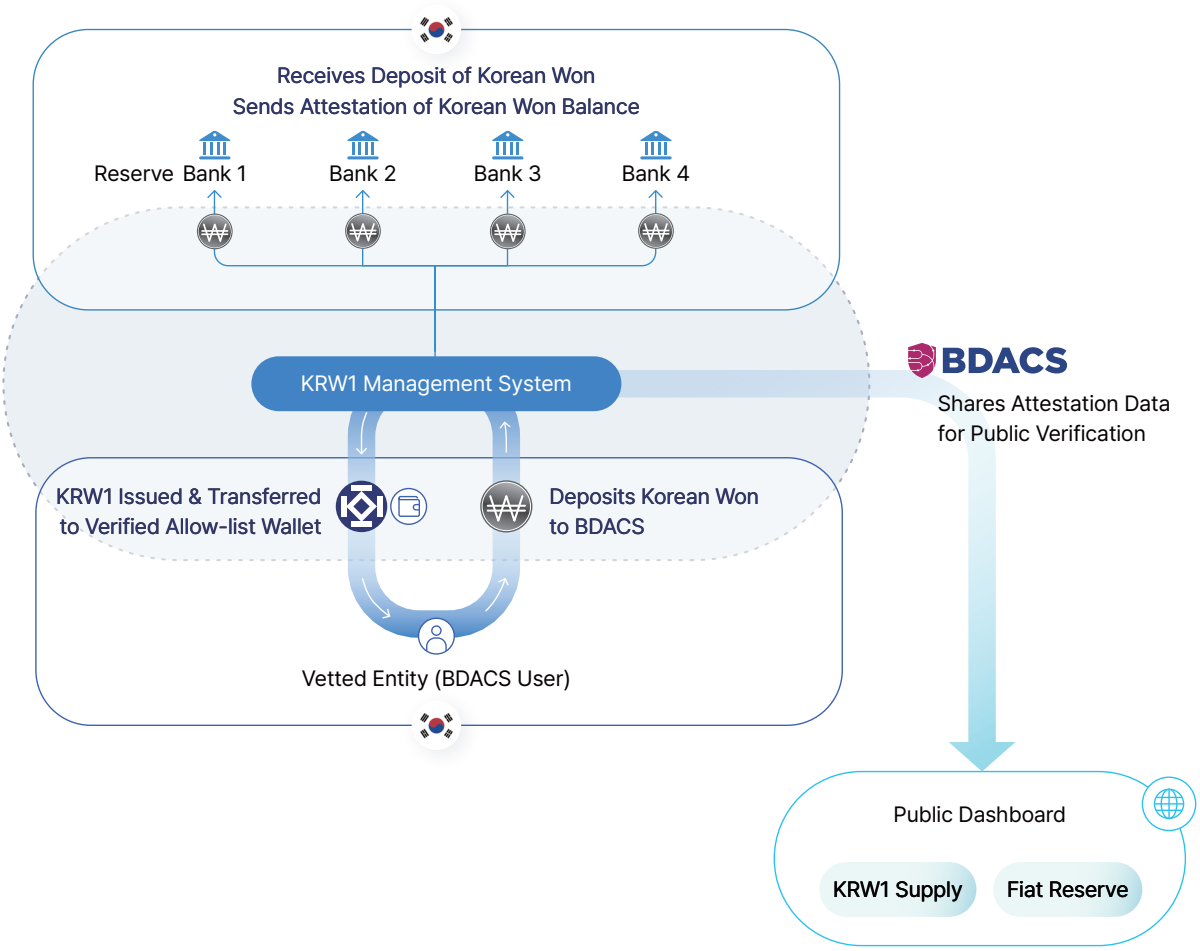
KRW1 incorporates multiple layers of transparency to meet supervisory and regulatory expectations:

- **Bank-verified Attestations**: Monthly confirmations from the reserve-holding bank establish ongoing proof of full 1:1 fiat backing and strict segregation of reserve assets.

- **Independent Third-Party Audits**: Semi-annual examinations by licensed accounting firms provide external assurance of reserve sufficiency, operational soundness, and adherence to applicable financial regulations.
- **Open Banking APIs**: Secure, regulator-accessible interfaces enable continuous reconciliation of on-chain token supply with off-chain reserve balances, supporting real-time oversight and systemic integrity.

This dual framework of cryptographic verifiability and institutional auditability ensures KRW1 remains fully compliant, transparent, and enforceable within any upcoming and evolving regulatory perimeter.

Figure 1 provides an overview of KRW1's management framework and illustrates how each safeguard element contributes to ensuring regulatory compliance and strengthening user protection.



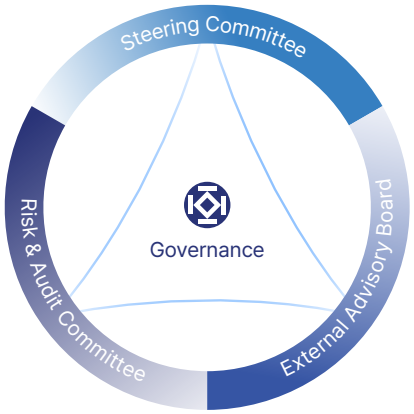
<Figure 1> Overview of the KRW1 management framework

GOVERNANCE, RISK, AND CONTROL FRAMEWORK

KRW1's long-term credibility and regulatory alignment hinge on robust governance structures, proactive risk management, and transparent control mechanisms. This framework safeguards user interests by ensuring full reserve protection, enforceable redemption rights, and transparent auditability—maintaining institutional trust, user confidence, and operational resilience across the KRW1 ecosystem.

7.1 Governance Bodies and Decision Protocols

Once KRW1 transitions into full production, it will set the gold standard for Korean Won–denominated stablecoin governance, anchored in a clear, multi-layered structure:



<Figure 2> Layered governance framework at the core of the KRW1 ecosystem.

1. **Steering Committee**: Comprised of senior executives and representatives from partners, including T1 commercial banks, responsible for strategic direction, policy enforcement, and alignment with prudential standards.
2. **Risk & Audit Committee**: Dedicated to identifying and assessing operational, financial, and smart contract–related risks, while establishing mitigation protocols and escalation workflows to safeguard systemic integrity and user interests.
3. **External Advisory Board**: Comprised of regulatory experts, legal counsel, and technologists, providing independent oversight, ongoing guidance, and periodic risk audits to ensure compliance and resilience.

This layered governance framework, as illustrated in Figure 2, enforces rigorous checks and balances, strengthens accountability, and embeds user protection at the core of the KRW1 ecosystem.

7.2 Risk Categories and Mitigation

KRW1's risk landscape is managed through a structured, multi-dimensional framework:

- **Cybersecurity Risk**: Mitigated through regular smart contract audits, continuous intrusion detection, off-chain compliance oracles, and a segmented MPC and air-gapped cold wallet architecture to prevent single points of failure.
- **Market & Liquidity Risk**: Addressed by maintaining full fiat reserve backing, ensuring real-time reconciliation of token supply with bank reserves, and instituting audit procedures designed to prevent redemption pressures and systemic "bank-run" scenarios.

- **Regulatory Risk**: Managed through continuous monitoring of evolving laws and best practices (*e.g.*, the Digital Asset Basic Act) and incorporating flexible compliance modules that adapt seamlessly to future supervisory requirements.
- **Operational & Settlement Risk**: Controlled via automated transaction logging, API-level reconciliation with designated banking partners, and redundancy planning to ensure continuity and minimize settlement delays.

Taken together, this framework positions KRW1's risk posture in line with international best practices for stablecoin oversight—protecting users, ensuring systemic resilience, and reinforcing regulatory trust.

7.3 Smart Contract Security and Upgradeability

The smart contracts under KRW1 are engineered for integrity, resilience, and adaptability:

- **Upgradeable Proxy Pattern**: Enables controlled enhancements or security patches without disrupting the on-chain state, ensuring continuity and stability.
- **Formal Verification & Independent Audits**: Conducted prior to deployment to detect and remediate vulnerabilities, establishing a defensible assurance standard.
- **Governance-Controlled Access**: Only authorized governance entities may approve upgrades, with embedded emergency response mechanisms allowing for issuance freezes when necessary to protect users and maintain systemic stability.

This design ensures that KRW1 smart contracts meet institutional-grade reliability standards while retaining the flexibility to adapt to evolving regulatory and security requirements.

7.4 Transparency Portals and Stakeholder Oversight

KRW1 offers institutional-grade transparency:

- **Stakeholder Dashboard**: Provides real-time insight into token supply, reserve balances, and audit status.
- **Public Snapshots**: Audit summaries and reserve attestations—are accessible to relevant parties to reinforce confidence.

	PERIOD	METHOD	AVAILABILITY
Third-Party Audit	Bi-annually	External Auditor (Top 4 Global Accounting Firm – Deloitte, PwC, EY, or KPMG)	Website
Attestation	Monthly	T1 Commercial Bank	Website
Real-Time Reserve Verification	Real-Time	Open Banking API	Website

7.5 User Protection

KRW1 embeds multiple protections to safeguard end users and strengthen trust in the ecosystem:

- **Minting Rights**: Only entities vetted by a regulated VASP, and subject to full KYC/AML procedures in compliance with applicable regulations, are permitted to deposit Korean Won and request the minting of KRW1.
- **Redemption Rights**: Every KRW1 token is fully backed and redeemable 1:1 for Korean Won, ensuring that users always have enforceable access to their funds.
- **Data Privacy & Security**: All KYC/AML procedures are conducted by a regulated VASP in full compliance with Korean rules and regulations, with user information processed and stored under strict security protocols, including encryption and access controls, to prevent misuse or unauthorized disclosure.
- **Transparency & Oversight**: Independent audits, bank attestations, and regulator-accessible APIs provide continuous assurance that reserves are fully maintained and that user redemption rights are protected at all times.
- **Consumer Protection Measures**: Emergency response mechanisms, including the ability to freeze KRW1 wallets in extraordinary circumstances, are in place to protect users from fraud, systemic risk, or operational failures.

Together, these safeguards ensure that KRW1 is not only convenient and efficient but also anchored in user rights, systemic resilience, and full regulatory compliance.

KRW1 ECOSYSTEM: USE CASES

KRW1's utility is designed to extend across various segments of Korea's economic, cultural, and financial ecosystem. From retail payments and e-commerce to remittances, institutional transactions, and even cultural initiatives such as digital ticketing and tokenized art, KRW1 enables a seamless bridge between traditional finance and the digital economy.

8.1 Domestic Treasury & Payments

KRW1 enables real-time settlement and programmable payments for domestic corporate treasury functions. By leveraging stable, blockchain-native instruments, firms can subsequently streamline liquidity management, reduce intercompany settlement latency, and minimize reconciliation errors.

8.2 Cross-Border Settlements and Remittances

Asia-Pacific cross-border stablecoin flows exceeded US$519 billion in 2024, illustrating a sharp demand for programmable, cost-efficient value transfer mechanisms. KRW1 represents a Korean-native alternative that reduces FX exposure, accelerates settlement times, and lowers transaction costs—which is especially beneficial for exporters, overseas workers, and SMEs.

8.3 Tourism, K-Culture, and Event-Based Microeconomies

South Korea's global cultural appeal drives inbound tourism, fueled by the Korean Wave (Hallyu) in K-pop, television, and cinema. In 2025, stablecoin-integrated Digital Teller Machines (DTMs) were launched across major tourist destinations, allowing foreigners to convert USDT into KRW or local transportation credits with biometric identity verification. These deployments underscore stablecoins' growing role in enhancing tourist experiences, especially when adapted for native currency denominations like KRW1.

KRW1 can also be natively embedded into tourist venues, fan engagement platforms, and K-Culture events—enabling microtransactions, collectible drops, and geo-fenced payments in a compliant, real-time format.

8.4 B2B Enterprise Infrastructure

KRW1 has the potential to serve as a settlement layer within enterprise systems, enabling programmable treasury flows, cross-border supplier payments, and on-chain invoicing. KRW1 can also improve B2B cash cycles and automate business logic tied to conditional payments, by eliminating intermediaries and streamlining trust via smart contracts.

8.5 DeFi, Trading, and Asset Tokenization Use

As a stable and fully backed KRW-denominated digital asset, KRW1 can be deployed in DeFi protocols for lending, staking, liquidity provision, and as collateral. It also supports tokenizing real-world assets (RWAs) priced in KRW—bridging capital markets and blockchain rails. Korea's active trading culture, which currently boasts one of the world's largest crypto markets by volume, makes it an ideal environment for these applications.

8.6 Payment Card Settlement

KRW1 is designed to make everyday payments faster, cheaper, and more convenient. As a Korean Won-denominated, KRW1 can power payment cards—both physical and virtual—that work anywhere Visa, Mastercard, or other credit cards are accepted. Because KRW1 runs on blockchain rails, payments move directly between users and merchants without layers of banks or FX processors slowing things down or adding hidden fees.

Every transaction settles instantly, refunds arrive in minutes, and conversion costs are far lower than traditional credit card markups, significantly lower processing fees, often as low as 0.01% compared to the ~3% markups common with traditional credit card payments.

3%
(Credit Card Processing Fees)

→

0.01% (est.)
(Stablecoin Facilitated Processing Fees)

OUTLOOK & ROADMAP

The KRW1 initiative is designed to continually evolve through a phased, regulator-aligned development model. The current proof-of-concept phase lays the groundwork for full-scale commercial issuance post 2026, contingent on regulatory readiness, banking partnerships, and infrastructure scaling. Key milestones and the long-term vision reflect KRW1's ambition to operate effectively across both domestic and international environments.

9.1 Proof-of-Concept Milestones (2025–2026)

The primary goal through 2026 is to validate the technical, operational, and regulatory assumptions underpinning a compliant KRW stablecoin. BDACS is focused on the following milestones:

- **Regulatory Integration**: Alignment with anticipated provisions in the forthcoming Digital Asset Basic Act and the existing USA-based GENIUS Act.
- **Banking Deployment**: Full integration of issuance and redemption rails through a T1 Korean commercial bank.
- **Live Transaction Simulations**: Real-time transaction simulations between allowlisted wallets to test settlement, burn, and redemption functions.
- **Monthly Attestations and Audit Prep**: Launching dashboard-level reserve attestations and submission to third-party review for audit-readiness.
- **Cross-chain Validation**: Verification of token deployment and stable compliance across multiple public and permissioned blockchain networks.
- **User Interface & Access Control Testing**: Stress testing mobile wallet flows, developer APIs, and identity-linking tools for wallet-level enforcement.

These deliverables form the cornerstone of KRW1's readiness to scale under a secure and compliant infrastructure model.

9.2 Post-2026: Commercial Issuance Readiness

Following the expected enactment and implementation in 2026 of the Digital Asset Basic Act, KRW1 will transition into a commercially issued, regulator-supervised Korean Won-denominated stablecoin. The post-2026 roadmap includes:

- **Full Public Launch**: Offering retail, enterprise, and institutional access to KRW1 within under compliance-integrated guardrails.
- **Banking Network Expansion**: To support cross-border KRW1 utilization, onboard additional Korean banks and explore international banking correspondents.
- **Retail & Enterprise Integrations**: Collaborating with fintech platforms, merchants, exchanges, and DeFi protocols to activate real-world use cases across tourism, treasury, and tokenized assets.

- **Real-Time Reporting to Regulators**: Deploying open banking APIs and compliance dashboards will enable supervisory agencies to view real-time token flows and reserves.

KRW1 will be positioned as Korea's flagship fiat-backed digital instrument—bridging traditional finance, programmable money, and international payments.

9.3 Technology Expansion (CBDC-readiness, zkProofs, RWA Custody)

Looking forward, KRW1 is envisioned as a modular foundation for even more advanced infrastructure:

- **CBDC-readiness**: KRW1 architecture is built to be interoperable with future central bank digital currencies (CBDCs), should the Bank of Korea opt to launch a digital Won.
- **zkProof Modules**: KRW1's compliance layer is designed to support zero-knowledge proof systems, which could enable privacy-preserving transfers with embedded AML compliance logic.
- **RWA Custody Integration:** Expanding the role of KRW1 as a settlement asset for real-world assets (RWAs), including tokenized bonds, real estate, and structured financial products held in regulated custody.

These next-phase developments will help KRW1 maintain relevance and utility as programmable finance matures into sovereign-grade infrastructure.

RISK DISCLOSURES

As with any fiat-backed digital asset initiative, KRW1 carries several categories of risks—legal, market, technical, and operational. These disclosures are intended to provide institutional stakeholders, regulators, and users with a transparent view of the potential vulnerabilities and mitigations.

10.1 Legal & Regulatory Risks

- **Evolving Regulatory Framework**: The Korean regulatory environment for stablecoins remains under development. Until the Digital Asset Basic Act is enacted and enforced post-2026, KRW1 remains a non-commercial proof-of-concept, not a financial product offered to the public.
- **Jurisdictional Complexity**: As foreign counterparties may use KRW1, it could be subject to differing international interpretations of digital asset laws in cross-border contexts.
- **Compliance Enforcement Risk**: Should local or international regulators modify enforcement policies, BDACS may be required to halt issuance, freeze tokens, or restructure governance processes.

As the issuer of KRW1, BDACS will work closely with legal advisors and key Korean regulators to ensure full alignment with the upcoming legal and regulatory framework established pursuant to the DABA, as well as Korea's VASP and banking regulations.

10.2 Market & Price Stability Risks

- **Liquidity Risk**: As a non-commercial pilot, KRW1 does not have secondary market liquidity guarantees. User redemption volume may be constrained by underlying fiat reserve accessibility or banking infrastructure latency.
- **De-pegging Risk**: While KRW1 is fully backed, market-driven perceptions or operational missteps (*e.g.*, delayed audits or failed redemptions) could cause temporary off-chain trading discrepancies against the KRW1 being pegged to the value of the KRW.
- **Redemption Bottlenecks**: In peak redemption periods, transaction throughput may temporarily exceed fiat release capacity or settlement speed.

To mitigate these aforementioned risks, as the issuer of KRW1, BDACS will maintain transparent reserve attestations, real-time reconciliation, and conservative issuance limits during the pilot phase.

10.3 Custody, Security & Operational Risks

- **Smart Contract Vulnerabilities**: Despite third-party audits and formal verification, the possibility of undetected bugs or zero-day exploits remains a persistent threat in any blockchain system.
- **Custody Breach or Insider Threats**: Secure multi-party computation and tiered access control policies reduce single-point-of-failure risk, but physical or social engineering attacks remain a possibility.

- **Infrastructure Downtime:** Interruption in bank APIs, wallet integrations, or compliance modules may temporarily affect issuance or redemption capacity.

BDACS will implement real-time monitoring, off-chain redundancy, and incident response playbooks to manage and mitigate such events.

10.4 Business Continuity and Contingency Plans

- **Issuance Suspension Protocols**: In a regulatory notice, security breach, or market instability, BDACS can invoke token issuance suspensions, wallet freezes, or controlled redemptions via smart contract modules.
- **Recovery and Reporting**: A disaster recovery framework includes data backups, off-site server redundancies, and a mandatory reporting protocol to the relevant financial regulators in the event of material disruptions.
- **Reserve Access**: Fiat reserves are held in custody with a T1 Korean commercial bank, under a segregated account structure, thus ensuring access - even during issuer bankruptcy.

The approach reflects best practices for regulatory transparency, aligning with global standards from the Financial Stability Board (FSB), FATF, and Korea's financial authorities. It also serves as a foundational disclosure during KRW1's transition from proof-of-concept to commercial issuance.

CONCLUSION

KRW1 represents a pivotal step toward establishing a sovereign-backed, fully compliant Korean Won stablecoin that is both technologically advanced and institutionally trusted. By demonstrating proof-of-concept through integrated and regulated custody platform, real-time reserve reconciliation, and rigorous governance structures, KRW1 validates that Korea possesses the infrastructure required to support the next generation of digital financial assets.

This initiative is more than a technical pilot; it is a signal of Korea's readiness to anchor its currency within programmable finance, reducing reliance on foreign-denominated stablecoins while reinforcing domestic monetary sovereignty. KRW1 is regulator-ready, enhances user protection and systemic security, and is built to operate seamlessly with Korea's T1 banking partners. Through layered transparency mechanisms and a governance model aligned with evolving supervisory standards, KRW1 offers a blueprint for responsible, trusted, and secure innovation in digital assets.

As Korea continues to establish regulatory framework around digital assets and stablecoins, both Korean Won and non-Korean Won stablecoins, KRW1 is positioned to evolve from demonstration into regulated commercial issuance. With clear pathways for adoption across retail, enterprise, cultural, and cross-border use cases, KRW1 stands ready to become the gold standard for Korean Won-denominated stablecoins.

We invite regulators, banking partners, enterprises, and ecosystem innovators to collaborate in shaping the future of KRW1 as it transitions from proof-of-concept to production—ensuring that Korea's digital asset economy grows with integrity, transparency, and global competitiveness.

About BDACS

BDACS is the leading regulated digital asset custodian for institutions in Korea, providing secure, compliant, and innovative prime custody solutions that enable our clients to confidently navigate the evolving digital asset landscape. As the only regulated custodian with a strategic partnership with a top-tier commercial bank in Korea, BDACS is setting the benchmark for institutional-grade digital asset custody and comprehensive suite of services designed to meet the complex needs of institutional clients, offering tailored custody solutions, seamless trade settlement, and broad market access. With the most expansive and forward-looking capabilities in the industry, BDACS is shaping the future of digital asset custody—delivering the trust, security, and operational efficiency that institutions require to drive their digital asset strategies forward in Korea and globally.

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