

Redbelly Network: An accountable data layer for AI powered financial services

Enabling equal economic opportunity through trustworthy technology.

July 1, 2025

Abstract

This whitepaper introduces Redbelly Network, a revolutionary layer 1 blockchain designed specifically as an accountable data layer for AI-powered financial services. Our solution addresses critical market gaps in the tokenisation of real-world assets (RWAs) while enabling AI agents to deliver personalised financial services at scale. By combining technical innovations with practical real world applications, our solution enables a secure, efficient, and orderly programmable capital market to power better financial products.

1 The Problem

Our antiquated financial system perpetuates structural inefficiencies including market concentration, information asymmetries, and insufficient access to assets. For asset issuers, these inefficiencies negatively impact their competitiveness, resilience, and cost of capital. In particular, these structural inefficiencies enable back office financial service providers to extract excess rent from asset issuers through an unnecessarily inefficient trust stack.

Blockchains, smart contracts, and decentralised finance, offer glimpses of a radical alternative: near-zero cost, transparent, and programmable value exchange. Tokenisation is a powerful catalyst for change, promising asset issuers a lower cost of capital through; reduced cost to serve, improved distribution and liquidity, and streamlined reconciliation and audits. This not only commoditises financial service providers, lowers switching costs, and increases competitiveness for asset issuers, but also democratises access to wealth-generating opportunities for investors by lowering investment thresholds, increasing liquidity, and expanding market reach.

Yet, tokenisation's true potential for unlocking value for real world assets (RWA) remains constrained by the need for regulated, orderly markets. Blockchains today lack a suitable trust stack for serving these kinds of assets, where it is essential to facilitate fair and transparent trading and operate efficiently and reliably with clear rules and regulations to establish market confidence. In current blockchain networks, you don't know who you're transacting with and you can't hold anyone accountable for their actions. It becomes extremely difficult to meet compliance obligations in such environments.

This problem is exacerbated by the rise of artificial intelligence (AI). With the future of finance becoming increasingly intelligent, the need for orderly markets becomes even more paramount. AI has the power to make financial products and services significantly more accessible, facilitating our interactions with them in natural language, increasing our financial literacy, and personalising our portfolios.

But this future demands accountability. We need to be able to trust the actions these agents take on our behalf to ensure markets remain orderly. Just as tokenisation requires an orderly market to thrive, AI agents need transparent, programmatic, and verifiable constraints to operate within regulatory boundaries. We must move beyond the black box and build trust through auditable, verifiable compliance.

The missing link? Accountable infrastructure - the foundation upon which both regulated tokenisation of real world assets and trustworthy AI powered financial services can be built. This infrastructure

must provide the transparency, auditability, and programmatic control necessary to ensure compliance and foster market confidence as well as the means to connect and enforce off chain rights and obligations with their digital representations.

Redbelly Network is built to bridge this gap. Redbelly Network is the accountable data layer architected for the future of finance. We provide an accountable layer 1 blockchain, a suite of compliance primitives, and collateral and liquidity protocols to empower asset issuers to build the next generation of financial products and services.

For asset issuers, our platform delivers the core benefits of tokenisation – lower cost of capital, increased resilience and competitiveness, wider distribution – within a framework that ensures institutional-grade security, scalable compliance assurance, and verifiable accountability. This unlocks resilient and competitive service provision for entire value chains. For AI agents, our platform unlocks an unbundled, fully programmable capital market, empowering them to navigate the complexities of tokenised real world assets with trust, efficiency, and resilience at scale.

This, ultimately, enables equal economic opportunity for us all.

2 Better Financial Products

Compliantly tokenising Real-World Assets on Redbelly Network unlocks fundamentally better financial products with distinct advantages for both asset issuers and investors that are not possible without an accountable blockchain. At its core, compliant asset tokenisation provides direct look through to the underlying cashflows and conformance of the asset in real time. This enables all actors within a value chain to determine whether the asset is performing within its mandate using a verifiable, single source of truth across the entirety of the value chain. This real time, granular understanding of the asset can be used to inform its value and risk profile throughout its lifecycle. To understand how the value proposition comes together, we will now describe the origination of a tokenised asset from issuance through to distribution, secondary trading, and yield payments.

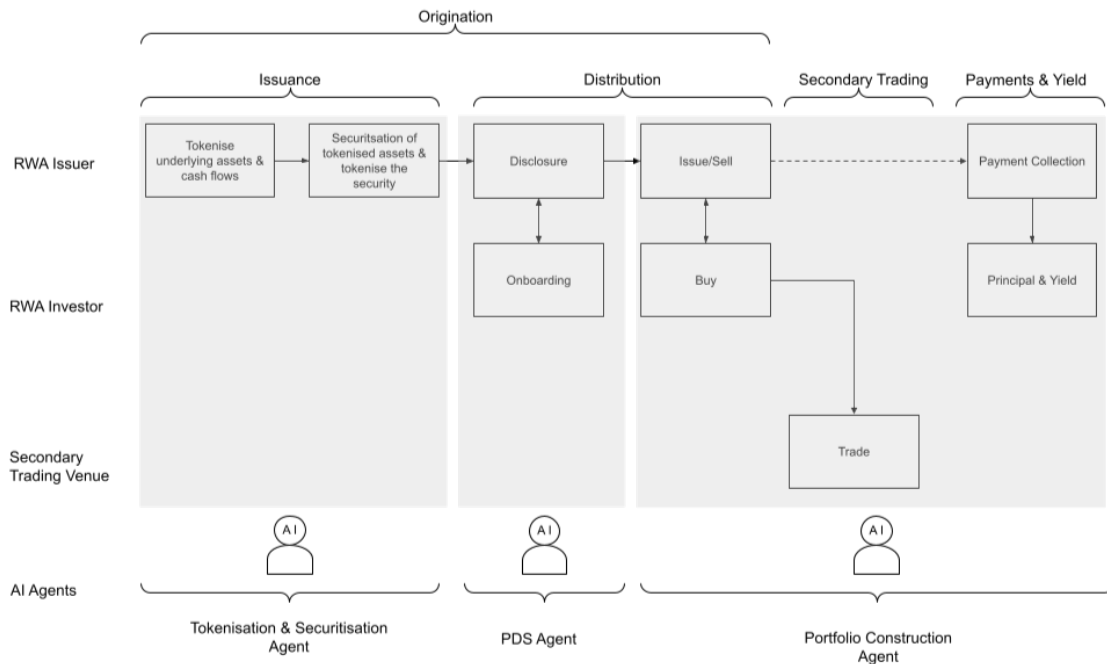


Fig. 1: RWA Tokenisation: Origination Aided by AI Agents

The first step involves tokenisation, where the asset, its rights and obligations, and its ownership are digitally represented on the blockchain using smart contracts. These tokenised assets can then be pooled together and packaged into a new financial instrument through securitisation. This process is undertaken by the asset issuer that issues new tokens, equivalent to bonds or shares, that are backed by the performance of the underlying assets.

For example, a company owning multiple commercial properties wants to borrow money against the future rent of those properties to buy more buildings. It then tokenises the rental contracts and borrows against the cashflows (secured by the properties as collateral) by issuing tokens to investors. The tokens represent fractional ownership in the underlying cashflow from the rental contracts, with these cashflow payments serving to repay the loan with a yield to the token holders.

The issuance, management, and trading of these tokens must comply with applicable securities laws, including following Know Your Customer (KYC) and Anti-Money Laundering (AML) procedures for investors and adherence to regulations governing the offering and sale of digital securities in the relevant jurisdiction.

A key advancement in this process is the automation of payment obligations on-chain. Smart contracts, which govern the behaviour of the digital tokens, can be programmed to automatically distribute payments generated by the underlying assets to the token holders. For example, in the case of the tokenised commercial property bonds, the smart contract can be designed to automatically collect rental income (such as through integrations with property management systems) and distribute it proportionally to the token holders based on their holdings, eliminating the need for manual distribution processes and enhancing transparency and efficiency.

Once compliantly securitised and tokenised, these bond tokens can be listed for trading on a secondary market such as an Automated Market Maker (AMM). An AMM is a decentralised exchange that uses algorithmic formulas to determine asset prices, relying on liquidity pools rather than traditional order books.

To list the tokenised security, the issuer or a designated entity would establish a liquidity pool by depositing a pair of tokens, typically the security token and a widely accepted cryptocurrency. Investors can then directly buy and sell the tokenised security from this pool, with the price adjusting based on the supply and demand within the pool. Note that because the asset issuer has been able to program the eligibility criteria into the definition of the asset, only parties that can prove their eligibility will be able to hold the token, ensuring the asset issuer's compliance obligations are met.

The integration of AI agents holds the potential to significantly enhance each stage of this process, offering a 10x user experience improvement compared to traditional, non-digital methods for various stakeholders.

For RWA Issuers: The creation of legal documentation, compliance checks, and investor onboarding are traditionally labour-intensive. AI agents can automate the generation and management of legal documents, continuously monitor regulatory changes to ensure ongoing compliance, facilitate product disclosure, and streamline KYC/AML procedures for investor onboarding leveraging Redbelly's RWA SDKs.

For RWA Investors: traditional investment processes often involve manual research and limited access to diverse opportunities. AI agents can provide intelligent due diligence by analysing vast amounts of data related to the underlying assets and issuers, offer personalised investment recommendations based on individual risk profiles, and even execute automated trading strategies on secondary markets to optimise returns and manage risk in a highly personalised fashion.

For Regulators: Monitoring market activity and ensuring compliance in traditional markets can be challenging. AI agents can enhance market surveillance by analysing blockchain data and trading activity on AMMs in real-time to detect potential market manipulation or illicit activities, automate

compliance monitoring to ensure adherence to regulatory requirements, and identify emerging risk patterns within the tokenised asset market.

In summary, the compliant tokenisation and securitisation of assets, coupled with automated on-chain payment obligations and trading on AMMs, represents a paradigm shift in financial markets where value and risk can be understood in real time for all participants in a value chain. The integration of AI agents across this entire lifecycle promises to unlock unprecedented levels of efficiency, transparency, and accessibility, ultimately benefiting all participants and fostering a more robust and inclusive financial ecosystem.

In the following sections we will outline the key components and innovations that make this vision possible.

3 Accountable Blockspace

The foundational concept of our system is accountable blockspace. The Redbelly Network has several unique features that work in concert to embed accountability into any application running on our network.

Firstly, all network participants are known. We enforce mandatory identity verification for all network participants through our marketplace of accredited verifiable credential issuers. By knowing who, or what, is transacting - from individuals, to businesses, to AI agents - the network has a baseline of accountability as all transactions can be tied back to a responsible entity.

Building on this foundation, at the execution layer, Redbelly implements an accountability assurance mechanism between the nodes that run the network. This mechanism, detailed in the next section, is able to detect and punish malicious nodes using undeniable proofs of fraud even in the case of a colluding majority, ensuring robust resilience and accountability of the network as a whole.

This extends into the application layer, where asset issuers leverage compliance primitives through our RWA APIs and SDKs to seamlessly embed turnkey jurisdictional compliance, according to their license and mandate, into their tokenised assets directly. This transforms the complexity of compliance assurance into an inherent property of the assets themselves.

The true power of this approach lies in compliance composability. This means that when different tokenised assets and protocols interact on our network, they automatically inherit the compliance properties of the underlying assets. This makes it much simpler for developers to build compliant decentralised finance applications for real-world assets.

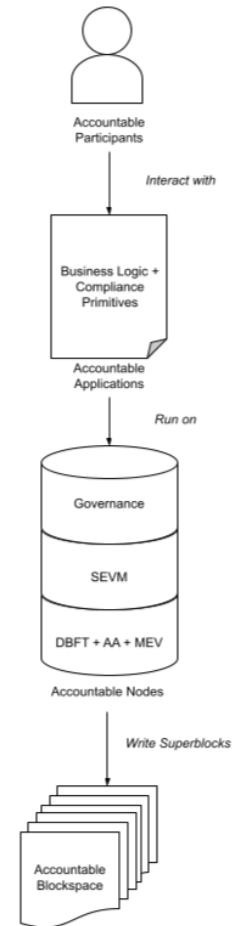


Fig 2. RBN's Accountability Model

4 System Components

The Redbelly Network platform is made up of several key components that enable the compliant asset tokenisation value proposition, including; A RWA capable blockchain, a suite of RWA specific APIs and SDKs, and collateral and liquidity protocols.

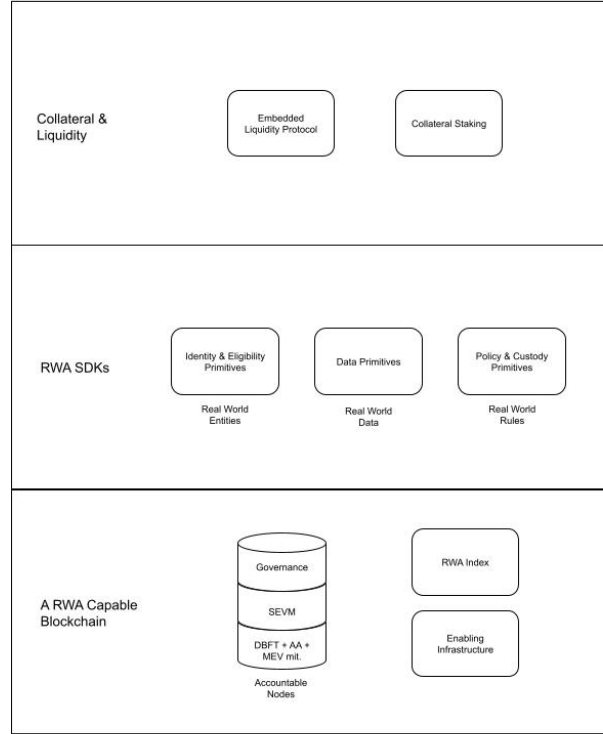


Fig 3. RBN's High Level Components

4.1 A RWA capable blockchain

At the core of our system is a RWA capable, layer 1 blockchain that implements novel security and scaling features that deliver Finality, Accountability, Security, and Throughput (FAST). It is built on four core technical innovations, detailed below.

4.1.1 Finality, Security, and Throughput through DBFT

For RWA issuers operating in regulated markets, the absolute certainty that transactions are final, secure, and tamper-proof is paramount. This underpins investor confidence and operational integrity. Redbelly Network achieves this critical requirement through our novel consensus mechanism, Democratic Byzantine Fault Tolerant (DBFT) consensus.

DBFT is a significant leap in the capabilities of blockchain technology. As a leaderless consensus algorithm, it eliminates single points of failure while enabling exceptional throughput and near-instant finality [1]. It cannot fork and has been mathematically proven to be correct through a process of formal verification through parameterised model checking, bolstering its security [2].

Unlike probabilistic consensus mechanisms found in traditional proof-of-work or proof-of-stake systems, DBFT is specifically designed for high throughput suitable for financial applications, rapid deterministic finality (meaning transactions are confirmed as irreversible within seconds, eliminating settlement risk), and exceptional resilience against sophisticated attacks, including collusion. This provides the

institutional-grade security and predictability essential for regulated financial assets.

Notably, DBFT has demonstrated over 97,500 transactions per second in production environments with near-instant finality in addition to a laboratory-verified maximum theoretical throughput exceeding 660,000 transactions per second [1]. In addition, when tested against other popular blockchains, Redbelly outperformed all of them under real application workloads such as an exchange (e.g. NASDAQ) or mobility service (e.g. Uber). In fact, Redbelly was the only blockchain able to successfully execute these real world workloads without losing transactions [3].

In classical blockchains, participants solve consensus by having different participants engage in ‘fierce’ competition: proposing their own block and trying to impose it on the system. If they succeed, then all other participants lose: their block is the only one appended at the next available index of the chain. This is a waste of resources as only one participant succeeds and the rest fail.

Redbelly nodes, on the other hand, solve consensus by combining distinct sets of transactions into a ‘superblock’ in a leaderless manner to commit more transactions per consensus instance, enhancing scalability and performance. In this sense, Redbelly consensus is collaborative instead of competitive and is able to reach agreement even in the presence of faulty or malicious actors.

The practical implication for issuers is significantly reduced counterparty risk and the potential for much faster settlement cycles compared to traditional finance, enabling new efficiencies and potentially novel financial products. For more detail on the technical implementation and testing of DBFT, see [2], [4], and [5].

4.1.2 Resilient Consensus through Algorithmic Accountability

Algorithmic Accountability (AA) extends on traditional Byzantine Fault Tolerant (BFT) systems and is designed to tolerate an adversary that controls more than half the system. Typically, BFT systems can only tolerate less than a third of faulty nodes [2]. This solution achieves algorithmic accountability through accountable consensus, proofs of fraud, and dynamic membership changes.

Essentially, if honest nodes disagree on the next block, the system can eventually output at least $n/3$ faulty nodes who are responsible for the disagreement. When faulty nodes try to cause disagreement, they leave cryptographically signed traces that honest nodes can combine to build undeniable proofs of fraud [6]. Think of these as digital fingerprints that cannot be denied.

Once honest nodes gather enough proofs of fraud against faulty nodes, they initiate a membership change. This process involves an exclusion protocol to remove the identified faulty nodes from the consensus committee and could also include an inclusion protocol to add new, presumably honest, nodes. This dynamic adjustment of the participant set allows AA to progressively reduce the proportion of corrupt nodes below the traditional BFT threshold ($1/3$), eventually leading to consensus [6].

In essence, AA doesn’t just tolerate a large number of faults; it actively identifies and removes the faulty participants based on cryptographic evidence, thus ensuring accountability and allowing the system to recover and reach consensus even under challenging conditions.

So, AA ensures that Redbelly is a very resilient system for reaching agreement. It can handle a large number of dishonest participants and has a mechanism to remove them, thereby holding them accountable [6].

4.1.3 Fairness through Maximum Extractable Value Mitigation

Our MEV mitigation protocol is designed to mitigate the issue of Maximal Extractable Value (MEV) that plagues current blockchains and hinders their ability to facilitate a fair and orderly market. MEV refers to the maximum value that can be extracted from block production by nodes by including,

excluding, or reordering transactions within a block. Those who control block production have the ability to influence the order of transactions. This gives them the potential to extract extra value beyond standard block rewards and transaction fees.

This protocol establishes a transparent and equitable system for ordering transactions, preventing validators from manipulating the order for their own profit.

At a high level, the protocol works by obfuscating details of transactions before they are processed by the system in a commit-reveal scheme through payload encryption [7], [8]. The system then implements a fair ordering of transactions based on the time at which the commit was received. This prevents the information asymmetry between users and nodes where nodes can monitor pending transactions and reorder them favourably [7], [8].

By neutralising the ability to reorder transactions, we are able to significantly mitigate front-running and ensure that all participants have a fair chance of having their transactions included in a block. The elimination of exploitative practices and the assurance of fair execution significantly enhance the overall market integrity of the blockchain. This increased trust and transparency are particularly crucial for attracting institutional investors, who require an orderly market.

4.1.4 Ethereum compatibility through the Scalable Ethereum Virtual Machine (SEVM)

We have implemented an optimised and scalable version of the Ethereum Virtual Machine (EVM) which is compatible with the innovations of our consensus layer. This Scalable Ethereum Virtual Machine (SEVM) allows Redbelly Network to support a diverse ecosystem of smart contracts, dApps, tools, and service providers with the underlying security and efficiency of the Redbelly blockchain.

This optimisation focuses on reducing the number of times each individual transaction undergoes full validation across the entire network. In a traditional EVM-based system like Ethereum, a transaction is validated when received and then re-validated before execution. The SEVM streamlines this by having a transaction validated initially when proposed and then the block containing it is validated when consensus is reached. This reduces the total number of full validations performed on each transaction network-wide.

Maintaining EVM compatibility is of paramount importance for a blockchain seeking to serve the Real World Asset market. By adopting the Ethereum Virtual Machine, Redbelly immediately gains access to a vast and mature ecosystem. This includes the largest pool of developers already proficient in the Solidity programming language, significantly lowering the barrier to entry for building RWA-centric applications. Furthermore, EVM compatibility allows the blockchain to leverage the extensive array of existing standards, tools, libraries, and infrastructure already developed for the Ethereum ecosystem, accelerating development and reducing costs.

Beyond development advantages, EVM compatibility fosters crucial interoperability with the Ethereum network and other EVM-compatible chains. This interconnectedness is particularly valuable for RWAs, which may need to interact with decentralised finance (DeFi) protocols or other on-chain services. The potential for seamless integration can attract greater liquidity and a larger user base from the established Ethereum ecosystem, driving faster adoption of Redbelly Network's solutions for tokenising and managing real-world assets.

In addition, Redbelly Network implements a fixed unit gas price in USD terms of \$0.000000476190476. A native transfer on Redbelly costs 21000 gas but only US\$0.01. This ensures predictability of costs for RWA Issuers deploying and operating on the network.

4.2 RWA APIs & SDKs

To achieve our vision, it is not enough to simply build a RWA capable blockchain. We also need to provide the means for asset issuers and investors (including AI agents) to interact with tokenised RWAs in a compliant way.

To this end, Redbelly Network offers a suite of APIs, SDKs, and other tools that allow RWA Issuers to seamlessly tokenise their assets with embedded compliance assurance, including linking the legal contracts that define the assets with the means to perform the rights and obligations defined there-within. The network’s compliance primitives are designed to meet compliance requirements for real world rules, use real world data, and enable real world people and businesses to participate.

For identity and credentialing requirements, we offer an Onboarding and Eligibility SDK which allows RWA Issuers to program service-level eligibility requirements into their onboarding flows. This SDK is powered by a verifiable credential data model based on W3C and Iden3. In this model, user data is kept at the edge and is not duplicated across each service provider which would create many honeypots of sensitive data. It leverages zero knowledge proofs as a means to preserve privacy and confidentiality whilst ensuring provability. The Onboarding and Eligibility SDK effectively provides RWA Issuers on the network with a near zero marginal cost identity verification and credentialing service, significantly reducing their cost to serve.

For policy and governance, RWA Issuers can leverage our Policy SDK. This SDK allows RWA Issuers to program custom policy logic into their assets or leverage templates. These policy artefacts are deployed as smart contracts on the network and offer a near zero marginal cost method of policy enforcement.

For digesting the off-chain real world data required to make compliant asset tokenisation use cases viable, RWA Issuers can leverage our First Party Oracle SDK, which allows them to either set up their own first party data feeds into their smart contracts or leverage other first party oracles already deployed on the network.

By being API and SDK led, we are positioning Redbelly Network as enabling “AI-first” user experiences. The APIs consumed by AI agents will usher in completely novel ways of interacting with financial products and services, delivering a 10x better user experience, eliminating the clunky user experiences typically associated with web3.

4.3 Collateral and Liquidity Protocol

To enable a programmable capital market, Redbelly Network requires collateral and liquidity to power many of the financial services on the network. Collateral plays a crucial role. It can be used to secure the network, as well as provide liquidity to RWA Issuers and Investors.

Whilst Bitcoin is the world’s most liquid digital asset, it mostly sits idle in wallets, representing a vast pool of unproductive capital. Redbelly Network looks to tap that pool of unproductive capital by offering BTC holders a seamless and secure way to participate in our burgeoning RWA ecosystem and earn yields on their otherwise idle asset.

The solution natively bridges BTC onto our network using threshold signatures run by the network’s nodes. Beyond simply bringing Bitcoin onto our network, our protocol strategically leverages its inherent security and market depth to enhance the resilience and stability of our ecosystem. Bridged BTC can be utilised for staking on network nodes, directly reinforcing the security of our consensus mechanism and disincentivising malicious activity.

Furthermore, restaking extends this security layer to other critical network functions such as verifiable credential issuers, oracle providers, and AI services. This interconnected security model, powered by the economic incentives of Bitcoin holders, fosters a high degree of trust and reliability across our

entire infrastructure.

This substantial pool of bridged Bitcoin serves multiple crucial functions within the Redbelly ecosystem, designed to directly benefit RWA issuers in tangible ways. Firstly, it provides robust, high-quality backing for native stablecoins utilised on the platform or serves as readily acceptable collateral within integrated lending and borrowing protocols. This capability is vital for ensuring reliable, low-volatility settlement mechanisms for RWA transactions and potentially offering asset issuers access to more efficient, competitively priced borrowing rates against their own tokenised assets, thereby improving capital efficiency.

Secondly, and critically for asset distribution, this deep, institutional-grade liquidity pool can significantly facilitate secondary market trading for RWA tokens issued on Redbelly. By providing a readily available source of value for market makers and institutional traders, it helps to enhance distribution, tighten bid-ask spreads, reduce slippage, and ultimately improve price discovery for the issuer's assets, making them more attractive to a wider range of investors.

By unlocking this vast pool of capital in this way, we are not only laying a robust foundation for a truly functional and programmable capital market, but also improving the “exchange of value” property of money that Bitcoin has thus far been unable to serve due to its volatility.

5 Tokenomics

The Redbelly Network is powered by the native Redbelly Network Coin (RBNT), which has a fixed supply of 10,000,000,000. The coin is used in core parts of the network to power its cryptoeconomic dynamics. These include transaction fees, staking, sharding, governance, and rewards and incentives. These activities are described in more detail in the table below.

5.1 Uses of the Coin

Category	Use	Description
Gas	Gas	The payment of gas fees to execute transactions on the network
Governance	Voting: network upgrades	The facilitation of community input to major upgrades to the network
	Voting: governance decisions	The facilitation of decisions related to foundation responsibilities e.g. allocation changes, top ups
	Voting: network reconfiguration	The facilitation of the core network security function of reconfiguring the set of validator nodes from time to time (both consensus and EVM nodes)
Staking	Consensus staking	The act of locking up native coins in order to participate in consensus on the network. The act of doing so earns the staker a reward
	SEVM staking	The act of locking up native coins in order to participate as a state machine on the network. The act of doing so earns the staker a reward
	Oracle staking	The act of locking up native coins in order to participate as an oracle on the network. The threat of having the stake slashed acts as an incentive to provide timely and quality data. The use of the oracle services provides a revenue stream for the oracle
Sharding	Shard initiation & management	The act of locking up native coins in order to create a shard on the network. Each participant in the shard needs to contribute to this deposit
Incentives & Rewards	Network effect acquisition	Incentives paid to early use cases based on the value they bring to the network (e.g. # users, # transactions, # contracts), paid in native coins from a dedicated incentive allocation
	Node incentives & rewards	Incentives and rewards paid to node hosts because of the essential service they provide to the network, paid in native coins from a dedicated allocation
	Oracle provision	Incentives paid to oracle providers for providing real world data input to the network, paid in native coins from a dedicated allocation
	Product Adoption Incentive	Incentive paid to early users of the product, paid in native coins from a dedicated incentive allocation

In addition, the table below describes how each of the key entities will use the coin to interact with the system through the key activities described above.

User	Interaction	Description
Consensus Node	Staking	<ul style="list-style-type: none"> Native coins are deposited 'at stake' as a disincentive for bad behaviour Native coins are rewarded to stakers as an incentive for providing this critical service
	Gas	Consensus providers receive a portion of gas fees, paid in native coins, as compensation for providing the consensus service
SEVM Node	Staking	<ul style="list-style-type: none"> Native coins are deposited 'at stake' as a disincentive for bad behaviour Native coins are rewarded to stakers as an incentive for providing this critical service
	Gas	SEVM providers receive a portion of gas fees, paid in native coins, as compensation for providing the SEVM service
Oracle Provider	Staking	<ul style="list-style-type: none"> Native coins are deposited 'at stake' as a disincentive for bad behaviour <ul style="list-style-type: none"> Bad behaviour includes bugs that provide wrong data, uptime/downtime thresholds Native coins are rewarded to stakers as an incentive for providing this critical service
Shard Participant	Shard Initiation	Native coins are locked/deposited by each participant in order to initiate a shard. These coins are locked from being used elsewhere on the network whilst the shard remains active
Governance Member/ Delegate	Governance Voting	Holders of Native coins will be able to vote on governance decisions that require a community vote. If coins are staked then the voting weight compounds
	Gas	Governance Members/Delegates pay gas fees, paid in native coins, as compensation to the actors that facilitate the governance transaction
Use Case	Incentive	Native coins are rewarded to early use cases on the platform from a dedicated incentive allocation as an incentive to bring as much network effect on to the platform as early as possible
	Gas	Users/use cases pay gas fees, paid in native coins, as compensation to the actors that facilitate the transaction
Product User (Use case)	Incentive	Adopters of the Redbelly Network products are rewarded an incentive, paid in Native Coins (or a rebate on the cost of the product) for being an early adopter of the Redbelly Network product suite

5.2 Allocations

Furthermore, the allocations at launch for the native Redbelly coin are detailed in the table below. These allocations are subject to governance, which is described in the final section of this paper.

Category	Type	Allocation	Description
Ecosystem Development	Incentives & Rewards <ul style="list-style-type: none"> Multi Phase Rewards Program Node Operator Provision Oracle Provision IDP Provision Staking reward 	37% 3.7 billion	Incentives & rewards allocated for behaviours that add social and network value to the Network, as well as entities that host Consensus and/or SEVM nodes, provide oracles and services that verify credentials.
	Ecosystem Grants Program <ul style="list-style-type: none"> Protocol R&D Capital Markets & Innovation Research and Social Good Redbelly Community 		Funds are allocated for various grant purposes, including technical innovation, research and development, capital market innovation, and activities that promote and maximise community and social good leveraging Redbelly Network technology.
	Network Effect Acquisition & Product Adoption Incentives		Incentives & rewards allocated to entities that bring significant network effect to the Redbelly Network in terms of users, contracts, transaction throughput, interactions, marketing partnerships, etc.
Entity Allocation	Redbelly Network Governance DAO	3% 300 million	Funds allocated to the Redbelly Network Governance DAO to fund and help facilitate its governance activities
	Investors <ul style="list-style-type: none"> Seed (13%) Private Sale A (7.3%) Private Sale B (6.9%) Private Sale C (0.7%) 	28% 2.8 billion	Funds allocated to investors
	Team (10%)	10% 1 billion	Funds allocated to the team to incentivise the continued development of the network
	USYD & CSIRO (2%)	2% 200 million	Funds allocated to the co-developers of core innovations of the network
	Reserve	20% 2 billion	Funds held in reserve, controlled by governance to help fund the long term future development of the Redbelly Network and broader ecosystem

5.3 Token release Schedule

Finally, the token release schedule for the native Redbelly coin is detailed in the table below. The “First Month” column refers to the number of calendar months following the listing on a public market. Tokens will vest weekly, commencing from the “First Month” column described below, on the same calendar day that the public market listing occurred. For example, if the token was first listed on the 15th day of a month, the Private Sale tokens will vest weekly from the 15th day of the calendar month that occurs 2 months after the public listing event. If there is no equivalent calendar day in the “First Month” (for example if the First Month has fewer days than the calendar month that the token was first listed in), it will instead fall on the last day of the First Month.

Vesting will complete on the last respective day of the “Last Month” column detailed below. In the previous example of the Private Sale tokens, all tokens will be vested by the 15th day of the same calendar month 14 months after the public listing event.

Note that the Ecosystem Development, and reserve allocations may also be subject to a custom token release schedule, as offered at the time.

				Release Schedule	
Entity	Allocation at launch (%)	Total Allocation	# Released at Listing	First month	Last month
Redbelly Network Governance DAO	3%	300 million	100 million	1	36
Team	10%	1 billion	0	12	36 ¹
USYD/CSIRO	2%	200 million	0	6	36
Seed Investors	13%	1.3 billion	0	6	32
Private Sale A	7.3%	730 million	0	2	14
Private Sale B	6.9%	690 million	0	2	12
Private Sale C	0.7%	70 million	7 million	2	10

6 Ecosystem Governance

There are several key entities relevant to the governance of The Redbelly Network, these are listed below:

- The Redbelly Network Governance DAO
- Redbelly Network Pty Ltd
- Governance Participants
- Governor Node Operators
- Candidate Node Operators

The Redbelly Network Governance DAO is a decentralised autonomous organisation that operates independently from Redbelly Network Pty Ltd. The Redbelly Network Governance DAO is a not-for-profit, community organisation focused on protocol governance, token dynamics, ecosystem support and administration, and ecosystem wide economic and policy decision making.

Redbelly Network Pty Ltd is a private company registered in Australia whose sole purpose is to focus on layer-1 development of the Redbelly Protocol and enabling the widespread adoption of Redbelly blockchain technology in the real world. The Foundation and company collaborate from time to time on innovative projects and initiatives to accelerate and maximise the value to the wider Redbelly ecosystem.

Whilst The Redbelly Network is in its bootstrapping phase, governance functions (excluding treasury management) will be performed by Redbelly Network Pty Ltd until such time as The Redbelly Network Governance DAO has been developed and the governance transition plan, as detailed in the roadmap, has been completed.

The main responsibilities of network governance are listed in the table below.

¹ It is a condition of release that a Team token holder is either actively employed by the Redbelly group of companies, or is engaged by Redbelly to perform services

6.1 Ecosystem Governance Responsibilities

Responsibility	Description
Network Upgrades	Updates to the core protocol run by nodes
Security	Network reconfiguration, changing the set of validator nodes on a regular basis
Ecosystem Support & Administration	<ul style="list-style-type: none">• Community rewards• Community grants
Economic & Policy Decision Making	<ul style="list-style-type: none">• Entity reallocations• Treasury Management• Other economic and policy decisions
Facilitate On-Chain Standardisation Processes	Proposal and adoption of new standards and specifications

7 Conclusion

The tokenisation of Real World Assets is not merely an emerging trend; it will serve as the cornerstone of a fundamental reshaping of global financial markets. Redbelly Network stands at the forefront of this transformation. While existing blockchains have faltered in delivering on the requirements of orderly markets, Redbelly Network offers a definitive solution.

Our accountable layer 1 blockchain, low cost compliance primitives, and collateral and liquidity protocols, provide the necessary ingredients for a fully unbundled, programmable capital market essential for real world asset tokenisation and intelligent finance.

By leveraging Redbelly Network, asset issuers can slash capital costs, vastly expand distribution, and programmatically embed compliance assurance at near zero cost. In addition, AI agents can leverage the transparent, programmatic, and verifiable constraints afforded by our infrastructure required to build trust in their actions.

Redbelly Network is not just building technology; we are architecting the trustworthy foundation for a future where financial services are more intelligent, interconnected, and ultimately contribute to equal economic opportunity for all. We are actively building this future, inviting pioneers to join us in realising the full potential of an accountable, AI-driven financial world.

8 References

- [1] Crain, Gramoli, Larrea, Raynal. DBFT, Proceedings of the 17th IEEE International Symposium on Network Computing and Applications 2018. <http://redbellyrw.cluster021.hosting.ovh.net/pubs/DBFT-preprint.pdf>
- [2] Bertrand et al. Compositional Verification of Byzantine Consensus. HAL 03158911, 2021. <https://hal.archives-ouvertes.fr/hal-03158911/document>
- [3] Tennakoon, Hua, Gramoli. Smart Redbelly Blockchain: Reducing Congestion for Web3. IEEE International Parallel and Distributed Processing Symposium (IPDPS), 2023. <https://redbelly.network/research/IPDPS23-SmartRedbelly.pdf>
- [4] Ekparinya et al. The Attack of the Clones against Proof-of-Authority. Proceedings of the Network and Distributed Systems Security Symposium, Internet Society, 2020. <https://www.ndss-symposium.org/ndss-paper/the-attack-of-the-clones-against-proof-of-authority/>
- [5] Crain, Natoli, Gramoli. Red Belly: A Secure, Fair and Scalable Open Blockchain. Proceedings of the 42nd IEEE Symposium on Security and Privacy SP, 2021. <https://drive.google.com/drive/u/0/folders/1Dz5r8EvJvRl1xI>
- [6] Ranchal-Pedrosa, Gramoli. ZLB: A Blockchain to Tolerate Colluding Majorities. 54th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2024. <https://gramoli.github.io/pubs/I-ZLB.pdf>
- [7] Gramoli, Lu, Tang, Zarbafian. AOAB: Optimal and Fair Ordering of Financial Transactions. 54th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2024. https://gramoli.github.io/pubs/DSN24_AOAB_preprint.pdf
- [8] Zarbafian, Gramoli. Lyra: Fast and Scalable Resilience to Reordering Attacks in Blockchains. 37th IEEE International Parallel Distributed Processing Symposium (IPDPS), 2023. <https://gramoli.github.io/pubs/IPDPS23-Lyra.pdf>