# Meridian Protocol

The Blockchain built for Stablecoin Remittance & Cross-border

The Problem

- **High Transaction Costs:** Remittance and cross-border payments are subject to exorbitant fees from multiple intermediaries, disproportionately affecting the senders and recipients.

- **Prefunding is Exorbitantly Expensive:** Payments companies are expected to deliver constantly and consistently—24/7 liquidity is critical. Accessing several million USD to prefund accounts and local currency positions costs several bps daily either in direct cost of capital or lost revenue on idle funds.

- **Unreliable Settlement and Middlemen:** The multi-layered nature of the system leads to high failure rates for payments and settlement times of several days, creating capital inefficiency and hindering economic activity. The big aggregators often use other aggregators, adding several layers of dependencies that often fail.

- **Control of the Dollars:** While the banks and financial institutions on the receiving side need the dollars, the USD is often taken by the sending bank, intermediaries, and third-party providers.

Remittance payments today are extremely complex with as many as 7 institutions standing between the sender and recipient, all taking their cut of the transaction and trying to claim the dollars.
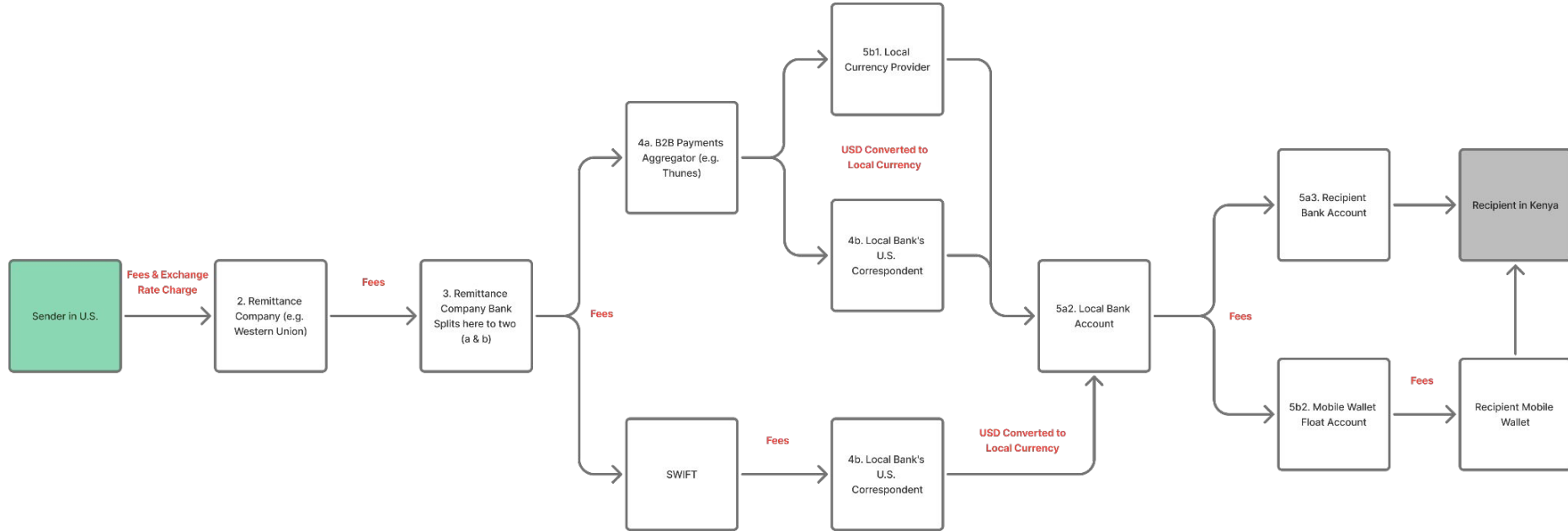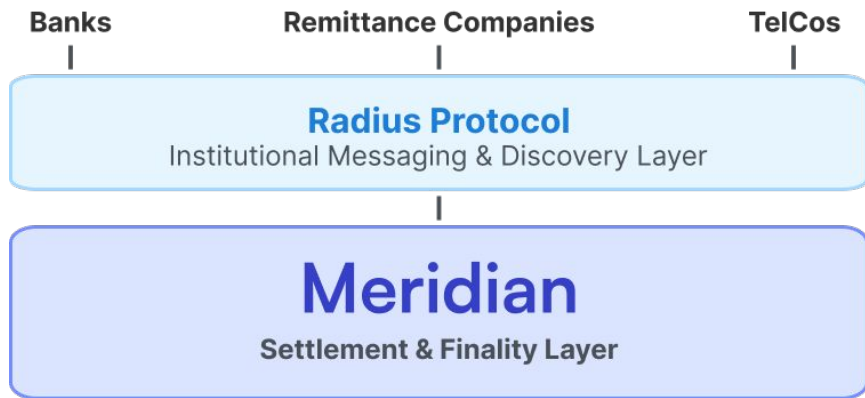

This complexity is why average global remittance costs are still 6.65%
(World Bank, Q2 2024)

The Solution

- **Direct, On-Chain USD Stablecoin Settlement:** Enable remittance companies and financial institutions to connect and settle transactions directly and instantly with each other via USD Stablecoins, eliminating third parties, high fees, and settlement delays. The financial institutions credit their customer directly—no more payment failures and third-party liquidity issues.

- **Real-Time Transactions without Prefunding:** By settling the recipient's institutional directly, remittance and payments companies send transfers in real-time as the customer transacts. Send 100 USD Stablecoins as the payment is happening, not $10,000,000 wires multiple days in advance.

- **A Dynamic & Discoverable Institutional Network:** A private "one-to-many registry" allows remittance and payments companies to discover and transact with any financial institution on the network directly without bespoke contracting, relationships, or integrations.

- **Sovereign Ecosystems with Compliance by Design:** Build on a "network of networks" model where institutions can deploy their own private, permissioned applications on the shared blockchain infrastructure. FIs gain granular control to set their own compliance rules and protect sensitive commercial data, while the underlying on-chain settlement provides an immutable and transparent ledger for seamless regulatory auditing.

- **Ensure the Dollars Land Where Needed:** Banks and financial institutions can ensure they receive the dollars they need for the remittance payments flowing into their systems and remain fully compliant in countries that require onshoring.

Introducing Meridian
The Blockchain built for Stablecoin Remittance

Banks   **Remittance Companies**   **TelCos**

Radius Protocol
Institutional Messaging & Discovery Layer

Meridian
Settlement & Finality Layer

This dual-layer system enables real-time, direct settlement with counterparties, completely eliminating payment failures and the need for costly prefunding of partners and local accounts.

By facilitating access to a globally discoverable network of vetted, compliant institutions, the protocol dramatically reduces the operational costs, counterparty risks, and complexities associated with traditional cross-border payments.

Remittance and payments companies can transact directly, instantly, and with cryptographic certainty, fundamentally reshaping their liquidity management and operational models.

Banks and mobile wallets ensure that they receive the dollars directly for each transaction, improving their margins and liquidity.

Meridian eliminates all third parties from the transaction, reducing the cost of remittance payments by as much as 90%.
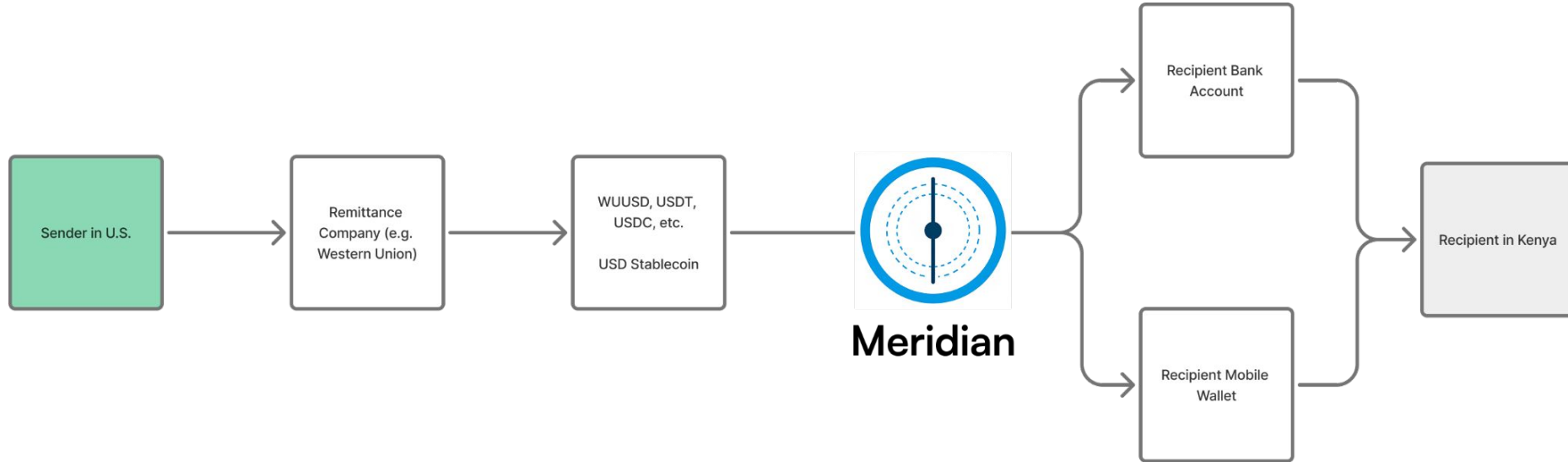
Benefits

For the Remittance Companies:

- Instant settlement with no third-party dependencies
- Eliminate all international banking and B2B FinTech middlemen fees
- No prefunding—send the money live as the customer transacts

For the Banks & Financial Institutions:

- No more middlemen taking your dollars. Receive USD directly from all remittance payments to your accounts.
- Offer instant credit for your customers receiving money from family worldwide.
- Receive more remittance payments and more dollars by enabling licensed, approved companies to send payments directly without intermediaries.
- Maintain full control over your transactions with selective transparency where only authorized entities can see sensitive details.

The Chain Architecture

Meridian is a **sovereign L1 blockchain** that provides full control over its own execution environment, validator set, and economic model. This architecture offers performance isolation while leveraging the core security benefits of a foundational public network.

High-Performance Consensus
The underlying consensus mechanism (snowman) is purpose-built for processing transactions in a linear, ordered sequence. This makes it exceptionally fast and efficient for complex operations like smart contract execution.

Rapid & Irreversible Finality
The protocol achieves agreement through a lightweight and rapid polling process among validators. This allows transactions to be confirmed and finalized in seconds, providing the certainty required for high-value settlement.

Permissioned Validator Set: Our proof-of-authority (PoA) model ensures that block production is handled exclusively by a permissioned set of known, vetted institutions. Security is derived from validator identity and reputation, not from staked capital, aligning the network's integrity with the real-world accountability of its operators.

Compliant by Design: All validators must pass stringent KYC/KYB screening, ensuring a foundation of trust and regulatory awareness for all network participants. Validators also choose to opt-in for broader network discoverability and participation.

Discoverability within the Network

Meridian replaces the need for costly, pre-established banking relationships with an open, real-time network for institutional settlement, powered by the **Radius Protocol**.

Discover Vetted Partners Instantly: All licensed institutions running nodes on the network can opt-in for discovery.

Instant Peer Verification: An institution can look up its counterparty on the registry and instantly verify their identity and credentials (e.g., licenses, regulatory status) using **Verifiable Credentials (VCs)**. This removes ambiguity and the need for third-party validation.

Peer to Peer Handshake: Once verified, the two institutions use the **Radius Protocol** to establish a programmatic, end-to-end encrypted handshake in order to pass the required compliance data settlement instructions.

Settle Directly, On-chain: Once the final handshake payload is signed by both parties, the settlement occurs peer-to-peer on the Meridian chain. The entire process—from discovery to transaction building to settlement—happens directly between the two parties.

Native Multi-Layered Built-in Compliance

Layer 1: A Vetted & Trusted Network
The Meridian network is secured by a Proof-of-Authority (PoA) consortium of known, regulated financial institutions that have passed stringent KYB screening creating a foundational layer of trust and accountability.

Layer 2: Protocol-Level Rules
The Radius protocol automates the peer-to-peer exchange of required sender and beneficiary information, seamlessly integrating FATF Travel Rule compliance into every transaction. Data is exchanged through private, end-to-end encrypted channels, never touching the public blockchain in order to protect customer privacy and meet institutional data protection requirements.

Layer 3: Auditable Transparency with Privacy
Institutions can deploy their own permissioned applications, giving them granular control over their own compliance rules and counterparty risk. All tokens transfers and interactions with permissioned applications are available to be selectively disclosed to provide an immutable audit trail for regulators or counter-parties without exposing confidential data.

Chain Performance / Security

Meridian is launching as a sovereign L1 blockchain. The chain features **consensus-level performance guarantees including**:

- **Finality:** ~1–2 seconds (achieving near-instant probabilistic finality)
- **Latency:** Transactions typically confirmed in under 2 seconds
- **Consensus Throughput:** Capable of **4,500+ TPS** (transactions per second) across the network under optimal conditions

Our blockchain is built on-top of existing EVM blockchain infrastructure but maintains full sovereignty with independent validators, token economics, and gas policies allowing us to fine-tune performance and governance without sacrificing scalability or reliability.