# BIS CPMI – Cross-Border Payments Frictions & Lifecycle (Ops Guide)

This document distills the BIS CPMI report (d193) into the exact concepts required to understand cross-border payment frictions, lifecycle stages, and why modern systems like SpherePay / SphereNet exist. It replaces the need to read the full report.

## 1. Cross-Border Payment Lifecycle

A cross-border payment moves through multiple stages, often across several institutions and jurisdictions. Frictions arise primarily at the boundaries between these stages.

- Initiation: payer instructs a payment.

- Messaging & validation: payment details are transmitted and checked.

- Clearing: obligations between institutions are agreed.

- Settlement: final transfer of funds on settlement ledgers.

- Reconciliation & reporting: balances and confirmations are updated.

## 2. Key Frictions Identified by BIS

- High costs due to multiple intermediaries and FX spreads.

- Low speed caused by sequential processing and time zone differences.

- Limited transparency for payment status, fees, and FX rates.

- Restricted access due to correspondent banking dependencies.

## 3. Structural Causes of Frictions

- Long transaction chains with multiple correspondent banks.

- Different operating hours across payment systems.

- Prefunding requirements in nostro/vostro accounts.

- Fragmented regulatory, legal, and compliance frameworks.

- Legacy batch-based technology and data limitations.

## 4. Risk & Liquidity Implications

Cross-border payments require liquidity in multiple currencies and expose participants to settlement risk until finality is achieved.

- FX funding risk when liquidity is unavailable.

- Settlement risk during multi-day processing windows.

- Operational risk from reconciliation failures and investigations.

## 5. Competition & Access Issues

BIS highlights that high barriers to entry reduce competition, reinforcing reliance on a small number of global correspondent banks.

- Smaller banks and PSPs depend on large correspondents.

- Reduced competition increases costs and slows innovation.

## 6. Data & Messaging Limitations

- Fragmented and truncated data across systems.

- Inconsistent message standards and formats.

- Manual repairs and investigations increase delays.

## 7. BIS Building Blocks (High-Level)

The BIS proposes coordinated global actions ('building blocks') to address cross-border payment frictions.

- Align regulatory, supervisory, and oversight frameworks.

- Improve payment infrastructures and operating hours.

- Enhance data quality and adoption of common standards (e.g., ISO 20022).

- Explore new multilateral platforms, CBDCs, and stablecoins.

## 8. What BIS Is NOT Claiming

- Technology alone does not solve cross-border frictions.

- Eliminating intermediaries does not eliminate regulation.

- Faster messaging does not guarantee faster settlement.

## 9. Ops-Relevant Takeaways

- Most delays occur between institutions, not inside one system.

- Liquidity management is as important as messaging speed.

- Transparency and data quality directly affect ops workload.

- Final settlement depends on settlement systems, not messaging layers.

## 10. Why This Matters for Sphere

SpherePay and SphereNet directly target the structural frictions identified by BIS by improving coordination, liquidity efficiency, compliance integration, and transparency across borders.