THE LEVEL ONE PROJECT

Cross-Border Payments:

The Level One Project Perspective

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This report applies a "cross-border lens" to the L1P Principles and Practices, highlighting those that require additional emphasis to achieve inclusivity in the cross-border context.

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THE LEVEL ONE PROJECT & CROSS-BORDER PAYMENTS

The Level One Project Vision for Cross-Border Payments

The Level One Project (L1P) design principles were initially focused domestically, helping countries solve the unmet payments needs of the poor, inside their borders. It quickly became apparent that those needs included cross-border transfers and that Inclusive, Instant Payments Systems (Inclusive IPS) could deliver cross-border payments in useful, convenient, affordable ways.

The payment needs of the poor include cross-border transfers.

The Level One Project views cross-border transfers as an instance in all payment needs or use cases. Cross-border transfers are present in any payment need – not just peer to peer (P2P) remittances. Primary among these are consumer to merchant payments, including e-commerce, and cross-border trade.

Global efforts like the G20's Roadmap (see page 6) articulate high-level targets for reducing costs and improving usefulness of cross-border transfers for end users.

The L1P vision is to ensure that cross- border, like domestic payments, are useful, convenient and affordable.

The following points are key to this vision:

The Scheme develops the needed technical and institutional basis for any Scheme participant to make cross-border payments. Any DFSP participating in a domestic Scheme should be able to participate in the cross-border Scheme with minimal additional effort.

Multilateral interlinking between domestic Schemes is the foundation for enabling inclusive cross-border payments. Bilateral linking on a Scheme-by-Scheme basis is costly and typically produces a confusing experience for providers and end users alike. Connect directly with other payments systems and develop a cross-border Scheme.

There is an essential role for central banks to play in achieving inclusive cross-border payments. The role may be an enabling one: creating supportive regulations or setting inclusion targets. It may also play a more direct governance role as the owner of the cross-border payments Scheme guiding inclusive outcomes.

This vision is the starting point. This report offers guidance on making this vision a reality.

Background

Although the Level One Project is not geographically limited, the primary focus is on realizing the desired outcomes for retail payments – often P2P remittances and P2M purchases but may also include a range of payment needs or use cases in Low and Middle Income Countries (LMIC) in Africa and Southeast Asia.

A key characteristic of this evolving landscape is the focus on creating cross-border Schemes to facilitate regional payment needs, often defined by membership in regional economic blocs. These regional payment Schemes typically are a layer on top of domestic inclusive payment systems. Their focus is, more often than not, geographically limited.

Cross-border payment needs, however, are not limited to sending and receiving transactions within a region. As regional IPS build out cross-border payment Schemes, care should be taken to not preclude future connections to other countries or regions. The desire to receive remittances from High Income Countries is an example of a near term driver for a connection beyond the region.

Regardless of the desired reach of the payment arrangement, there should be an all-encompassing focus on creating inclusive outcomes.

All aspects of the Level One Project are relevant for a payment system that seeks to be inclusive. This report applies a "cross-border lens" to the L1P Principles and Practices, highlighting those that require additional emphasis to achieve inclusivity in the cross-border context.

This report describes the key aspects of the L1P cross-border vision. The Summary Box on the next slide outlines this guidance, which is detailed in the following sections.

Policy Actions on Cross-Border Payments

Coordinated global efforts are underway to improve cross-border payments for high-value (e.g., wholesale payments) as well as for low-value (e.g., retail payments and remittances) transactions. The resulting G20 Roadmap established target goals and deadlines by which progress should be achieved through government policy and industry improvements. Below are the goals for low-value transactions.

Targets for the G20 Cross-Border Payments Roadmap

	Retail Payments	**Remittances (P2P only)**
Cost	Global average cost of payment to be no more than 1%, with no corridors with costs higher than 3% by end 2027	Global average cost of sending $200 remittance to be no more than 3% by 2030, with no corridors with costs higher than 5%
Speed	75% of cross-border retail payments to provide availability of funds for the recipient within one hour from the time the payment is initiated and for the remainder of the market to be within one business day of payment initiation, by end-2027	75% of cross-border remittance payments in every corridor to provide availability of funds for the recipient within one hour of payment initiation and for the remainder of the market to be within one business day, by end-2027
Access	All end-users (individuals, businesses (including MSMEs) or banks) to have at least one option (i.e. at least one infrastructure or provider available) for sending or receiving cross-border electronic payments by end-2027	More than 90% of individuals (including those without bank accounts) who wish to send or receive a remittance payment to have access to a means of cross-border electronic remittance payment by end-2027
Trans-parency	All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.)	

Source: Reproduced from "*G20 Roadmap for Enhancing Cross-border Payments First consolidated progress report*", 2021.

L1P Principles and Practices for Cross-Border Payments

The L1P Principles and Practices which take on heightened relevance in the cross-border context are listed in the box on the next page. The section on "Cross-border Implication of the L1P Principles" emphasizes those cross-border complexities, describes their implications, and articulates Guidance and Market Illustrations. At this point, the guidance offered is largely aspirational because no cross-border payment system has yet to distinguish itself as a complete reference for inclusive cross-border payments.

Here a Practice is categorized by the corresponding Principle defined in the Level One Project. The highlighted Practices are augmented with specific guidance and illustrations that should be top of mind for implementors prioritizing cross-border payments.

Still, it is important to note that the implications can have cross-cutting import. For example, foreign exchange, a prominent cross-border feature in Transparent Terms, is relevant not only to Safe Payments but also potentially to Shared Capabilities.

The table on the next page shows the complete set of Principles, Practices and cross-border guidance.

The L1P "Cross-border Lens"

Principle	Practice	Guidance
Instant Payment	Near Real-Time Settlement	**Only settle an obligation in one currency if the settlement of the other currency also takes place.** Minimize FX settlement risk in the system by requiring that the FX conversions are not unbalanced. **Avoid third currency conversions.** Avoid the additional cost introduced by foreign exchange conversions into a "third" currency.
Interoperable	Modern Technical Architecture	**Design for multilateral interlinking.** Link domestic schemes multilaterally to create cross-border Scheme.
	Data Readiness	**Support cross-border data requirements.** Support additional information requirements for all countries reached in the cross-border arrangement.
Inclusive Governance	Regulated & Supervised	**Have an appropriate oversight mechanism**. Work with Regulator(s) to determine and put in place an appropriate oversight mechanism for cross-border services.
	Inclusive Scheme Rules	**Adopt favorable FX rates.** Foreign exchange rates are advantageous for the end user. **Encourage participatory rulemaking.** Scheme rules for cross-border payments are developed in a consultative, inclusive manner.
Low Fees for End Users	Low Fees for DFSPs	**Keep cross-border fees for DFSPs very low.** The Scheme should take efforts to keep the DFSP fee low so fees to end users can be affordable for this important payment need.
Safe Payments	Transparent Terms	**Use shared cost disclosures for all cross-border transfers.** DFSPs disclose the total cost of the transaction using the same formula for informing senders of both fees and foreign exchange costs. **Reference and display benchmark FX rate in the disclosure.** DFSPs should calculate total FX cost by referencing the benchmark rate (also referred to as a reference rate, this rate is used to reflect the economic value of currencies and is for informational purposes only) for each currency pair. DFSPs should also display the benchmark rate to the end user.
	Tiered KYC	**Maintain Tiered KYC requirements for cross-border transfers.** Low-value, cross-border transfers are available to end users with basic identification.
Shared Capabilities	Shared Services	**Provide cross-border capabilities to all DFSPs as a Shared Service.** Cross-border capabilities are available to all DFSPs as an optional, Shared Service.

About this Report

This report focuses on describing the Level One Project vision for cross-border payments and how we seek to achieve affordability, convenience and usefulness. It is not intended as an implementation guide for cross-border payments.

A suggested background resource on cross-border models is the “Multi-Country Integration of Domestic RTRP Systems” report, available in the Library page of the Level One Project website.

The next section describes the predominant challenges in today’s cross-border payment landscape and highlights efforts to overcome them. While some improvements are being realized, much more effort will be needed to achieve inclusive cross-border payments.

The bulk of the report provides detailed Guidance and points to Market Illustrations that implementers of Inclusive IPS can leverage for delivering useful, affordable cross-border and cross-currency payments for low-income users.

The last section offers a quick stock take and some forward-looking observations on the emerging innovations that could accelerate cross-border payment improvements and inclusivity.

Why Cross Border Payments [still] Need Improvement

Outlining the Challenges

Despite large volumes, market arrangements for cross-border retail payments, particularly low value remittances, can be expensive. A recent IMF report estimates that the value of retail cross-border flows ($44.5 trillion) in 2023 – that's roughly 42% of the value of global GDP ($106.2 trillion) in the same year. The table also shows the average cost by type of transaction.

Global Retail Payments		
Cross-Border Flow	**2023 $USD Trillion**	**Avg. Total Cost (%)**
Wholesale B2B	**145.6**	**0.1**
Retail B2B	**37.9**	**1.5**
Retail C2B	**3.1**	**2.0**
Retail B2C	**1.7**	**1.7**
Retail C2C	**1.8**	**2.5**
- Remittances subset of C2C	**0.5**	**6.2**

Source: IMF report (compiled from various data sources), 2025

While these estimates do not differentiate poor end users from other users of retail payments overall, **retail payments – those most used by poor end users are far more expensive than wholesale, large value payments.**

The IMF data in the chart shows that **remittances are the costliest of the cross-border use cases or flows, averaging 6.2 percent of the value of the transaction**.

Similarly, World Bank analysis of remittance prices, illustrates that average cost varies widely by market. The cost to send a remittance to Mexico (4.9%), for example, is well below the average global cost to send a remittance (6.6%) while the average cost to send to countries in Sub-Saharan Africa remains stubbornly higher at 8.4% in Q3 2024 (and can be higher when paid in cash). Both are well above the G20 target of 3% total cost.

Other frictions are also notable. A BIS report notes that around 15% of the cost of a correspondent banking transaction (i.e., when one bank provides a service to another bank) can be attributed to foreign exchange costs. This is a significant portion but lags the higher estimated costs for treasury operations (30%) and nostro-vostro liquidity (35%).

End users also face a host of additional difficulties in making cross-border transfers. These include:

- Challenges when the sender does not possess the requested type of ID or documentation
- Complete lack of availability to send / receive between some corridors
- Lengthy and/or uncertain delivery time
- Hidden fees and unclear terms
- Problems associated with account numbers being unknown to senders, and the fact that many non-traditional account-holding institutions use different account number structures

Why High Costs Persist for End Users

High transfer fees and disadvantageous foreign exchange rates consume a portion of funds being transferred – regardless of whether these are P2P remittances from a family member or a small trader payment to a supplier – and reduce the amount received by families as well as businesses.

There has been considerable focus on the high cost of P2P remittances, the costs for which, have fortunately declined over the past decade. However, this trend is not constant and varies by corridor as well as the type of provider according to the World Bank. Mobile money operators and money transfer organizations (MTOs) have consistently lower costs than post offices or banks. Even as less is known about cross-border payments made by small businesses, the challenges faced by end users making transactions to/ from emerging market economies are similar:

- **Transaction Fees**: Globally, the average cost of sending remittances is around 6.6% of the amount sent, as of September 2024 per the World Bank. Remittances made digitally have much lower costs than non-digital ones.
- **Exchange Rate Markup**: Providers often add a markup on top of the exchange rate, which can significantly increase the cost, especially when the provider is getting a daily rate rate from another provider that already included a mark up.
- **Intermediary Fees or Beneficiary Deductions**: A transaction involving multiple DFSPs can have a fee tacked on or deducted from the principle at each stage. This is much more common than in the past. Today, a similar fee is more likely to be included upfront in the sender's fee.
- **Limited Liquidity:** Some currencies have low supply, typically because the country imports more than it exports, or are difficult to convert due to policy constraints. This is sometimes referred to as being *illiquid*, or an *exotic currency,* signifying that the currency is not widely traded because foreign exchange providers are less willing to hold them as balances or to trade them.
- **Double Conversion:** When two currencies with limited liquidity need to be converted, they are often exchanged via a third "hard" currency like the dollar or euro. This means that Currency A is first converted into euros and then converted out into Currency B – undergoing not one but two conversions with a portion of the value lost each time.

Actions by Regulators and Inclusive Instant Payment Systems can be taken to lower each of the contributors to high costs to end users.

Key Trends

The fundamental importance of remittances to many economies has spurred global policy engagement to improve cross-border transfers, led by the G20 (See Slide 5 for additional detail) and the UN Sustainable Development Goals.

While remittances are a high-profile example of the diverse user needs for cross-border payments, the sluggish pace at which improvements occur is indicative of the difficulty in achieving progress.

Cross-border methods are modernizing but do not solve low-income end user needs. Traditional bank transfers eliminate the need for costly cash-based transfers but do not work well for low-income end user payments. The chain of banking intermediaries can introduce disproportionate costs, delivery times may be uncertain, and fees are often not transparent. These factors are additional to the fact that low-income senders and receivers are not likely to hold accounts with traditional banks.

Alternatives to traditional bank transfers are making progress but have been slow in delivering truly low-cost transfers. Traditional money transmitter organizations (MTOs) and mobile money operators (MMOs) also offer cross-border payments, working independently or sometimes in partnership, have made cross-border payments more accessible. The GSMA notes that fees for cross-border transfers via mobile money have fallen, but these have been offset by higher exchange rate margins.

Despite improvements, total costs for cross-border payments are still very high as well as challenging to compare. The 2024 G20 progress report noted that cost of retail payments remains above the 1% target at 1.6% for business-to-business transfers and up to 2.6% for person-to-person transfers. Similarly, the average fee for remittances was 6.4% of the total value. Additionally, there is no official effort or campaign to standardize how these costs are reported to end users, allowing providers to position costs and use language that best suits their needs.

Instant payments can lower the high cost of cross-border payments by taking advantage of low-cost domestic instant clearing and settlement systems, the associated collective reductions in risk, and global standards. As subsequent slides describe, there is an emerging trend in this direction. While the few examples of this are not yet mature enough to provide solid evidence to support this hypothesis, strong measurement and analysis should follow.

Inclusive IPS increase competition by providing access to non-bank participants, are motivated to reduce Scheme costs and, ultimately, to end users. Immediate availability of funds is a key attribute for low-income receivers.

Nexus Global Payments

Standardized interlinking of domestic IPS for exchanging cross-border payments is the goal of Project Nexus. Essentially a technical layer interconnecting participating domestic IPS, initial development was spearheaded by the Singapore Innovation Centre of the Bank for International Settlements (BIS).

Evolving from an aspirational concept to a blueprint for improving cross-border payments (Project Nexus) to a full-scale technology project featuring the creation of Nexus Global Payments, an entity incorporated in Singapore to "operationalise and manage" the Scheme. A software module that links each participating IPS, Nexus Global Payments will provide the core functions for exchanging cross-border payments and carry out the exchange of payment and information by passing the relevant data to the receiving IPS and the destination Settlement Account Provider, respectively.

When it was a proof-of-concept, Project Nexus worked with central banks and IPS operators of India, Malaysia, the Philippines, Singapore, and Thailand to benchmark the model with their IPS and develop a Scheme (including business and technology design) and governance framework.

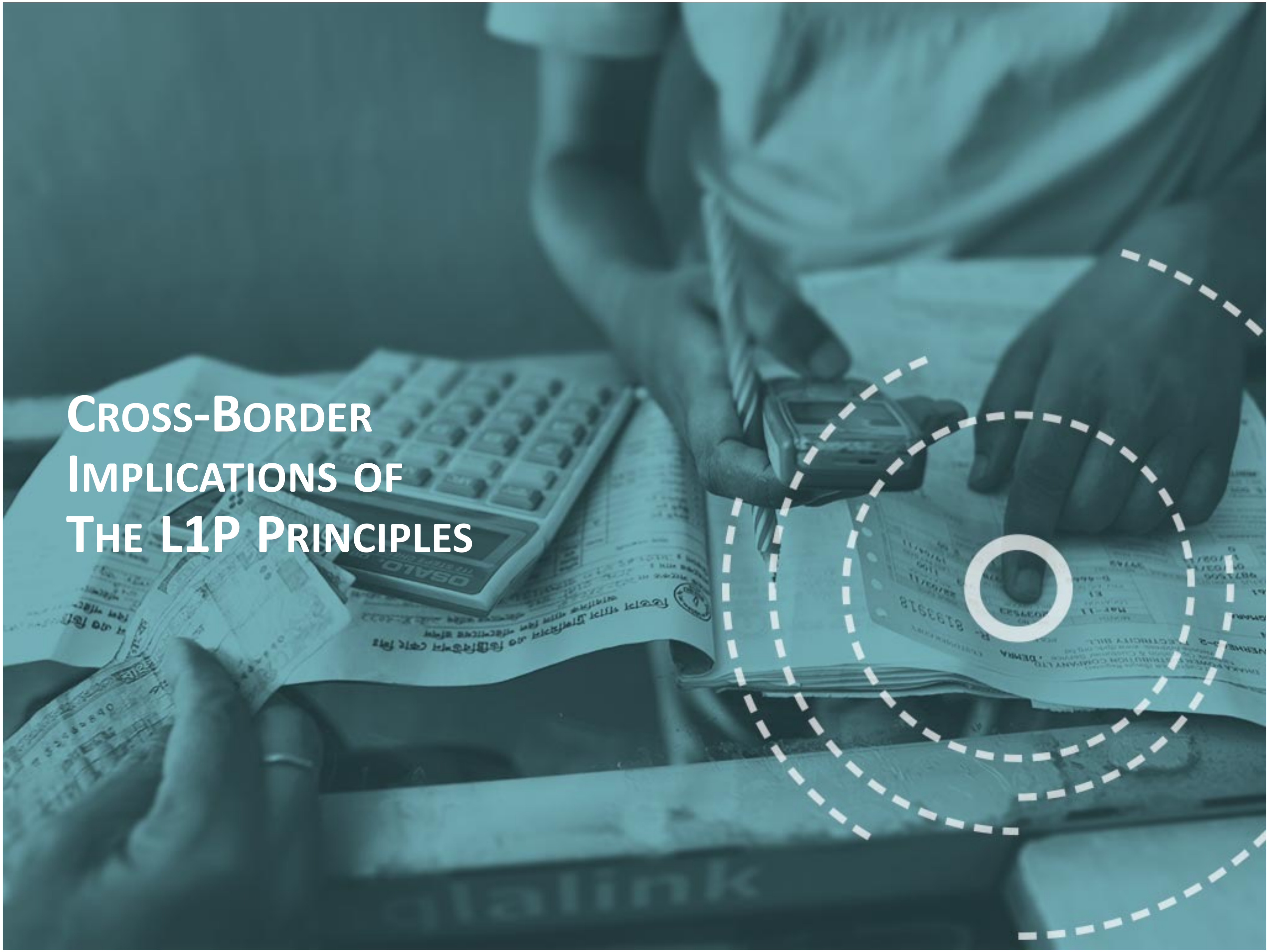
Differently focused than the Level One Project, the aim of Project Nexus / Nexus Global Payments is to improve the cross-border interconnection between existing IPSs while L1P seeks to ensure the inclusive nature of both cross-border and the underlying domestic payments.

In this context, there are areas of nonalignment including **Interoperable** (Nexus leaves inclusion of non-bank providers up to domestic IPS discretion), **Pay Everywhere for Anything** (Nexus has P2M in a future phase and government payments are not prioritized), and **Safe Payments** (Nexus leaves fraud liability rules and Tiered KYC to the discretion of the country IPS). **Low Fees for End Users** is not a stated goal.

However, there is agreement or partial agreement on the L1P Principles of **Instant Payment, Shared Capabilities** (use of merchant directory and gender disaggregated data not stated), and **Inclusive Governance** (Nexus supports inclusive Scheme rules and implicitly supports a strong role for central banks but is silent on the need for a common brand or how the IPS is regulated).

L1

Source: See websites for BIS Project Nexus and Nexus Global Payments.



Cross-Border Implications of The L1P Principles

Instant Payment (1 of 2)

Practice	Cross-Border Implications	Guidance: • **Market Illustrations**

Near Real Time Settlement	Settlement needs are more expansive for cross-border payments as domestic currencies need to be converted into a foreign currency and the foreign currency transactions must also be settled. While there are different points in the transaction at which the FX conversation could be carried out, a lack of available liquidity in certain currencies may cause delays / higher costs and this challenge is exacerbated by the fact that most RTGS systems (commonly used for settlement) are not operating 24/7. Additionally, time lags between settlements can also create risk and lead to costlier transactions.	**Only settle an obligation in one currency if the settlement of the other currency also takes place.** Scheme rules should minimize FX settlement risk in the system by requiring that the FX conversions are not unbalanced. While the Scheme itself may not perform the FX, rates can change quickly and this guidance protects the payment system overall so that no DFSP or FX provider is at risk (along with the underlying value being converted). This practice reduces settlement risk and is often referred to as Pa*yment versus Payment (PvP).*
		
		• **Buna** has used PvP since 2023 to ensure simultaneous settlement of both currencies in FX trades. PvP is also more efficient for managing liquidity and minimizing risk
		• There are various options / evolutions to consider:
		  • Start with **Deferred Net Settlement (DNS**) with limited (1) settlement window per day and gradually introduce additional settlement windows
		  • Then move to **Continuous Net Settlement (CNS**) – with windows as short as 30 seconds. The RTGS systems **SPEI (run by Banco de México**) and **CHIPS (run by The Clearing House**) both use multilateral CNS
		  • More ideal would be starting with Continuous Gross Settlement (CGS) as **TIPS in Tanzania** did

Instant Payment (2 of 2)

Practice	Cross-Border Implications	Guidance: • Market Illustrations

Near Real Time Settlement	(cont.)
	
	The currencies used in an FX conversion can also have a significant impact on affordability for end users. "*Double FX conversion*" occurs when a third currency (often the euro or the USD) is used as a medium of exchange, resulting in additional, burdensome costs to end users.
		Avoid costs introduced by converting into a "third" or intermediary currency. A leading contributor to the high cost of cross-border payments for end users whose national currencies are not highly traded globally is double conversion into a highly traded currency and then conversion out to another thinly traded currency. Central banks should explore different, potential solutions to this difficult challenge.
		
		• By using multilateral netting, the **CLS Bank** found that it reduced funding requirements by about 96%
		• Options for overcoming situations where foreign exchange conversion is not available for a currency pair include
		  • DFSPs can hold liquidity pools of foreign currencies so that instant FX clearing and settlement can occur at better rates than with *double conversion*. **Buna** offers this capability
		  • Using a stablecoin to replace the conventional foreign exchange process where the stablecoin provides the intermediary conversion between the two fiat currencies
		  • *Novation* reduces foreign exchange risk by reassigning contract obligations by agreement of the parties, and may be a solution

Interoperable

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Modern Technical Architecture	A cross-border payment should be end-to-end interoperable including messaging formats and operating protocols. The platform connects to other appropriate domestic or cross-border systems, as needed. Multilaterally interlinking existing domestic Inclusive IPS, using standardized protocols, lowers infrastructure and operating costs and drives scale efficiencies	**Design for multilateral interlinking.** Link domestic schemes multilaterally to create the cross-border Scheme by directly connecting with other payment systems using standardized protocols. The resulting cross-border Scheme brings together all the payment systems into an interoperable, harmonized set of rules and protocols. • A standardized set of ISO 20022 market practice / usage specifications exist in **Cross-Border Payments & Reporting (CBPR+)** and are available for no cost on SWIFT My Standards. **Provide all needed functionality for domestic and cross-border transfers.** The Scheme should provide detailed technical guidelines and robust functionality for DFSPs, including fraud detection and sanctions screening, to make it seamless for any DFSP to make cross-border payments. • The **Single Euro Payment Area (SEPA)** is a framework for harmonizing cross-border payments in euro, providing cost reductions through economies of scale. It also eliminates intermediary frictions and fees. **SEPA Inst** is the Scheme for instant payments in euro • **NEXUS Global Payments** seeks to standardize how domestic IPS connect to each other for exchanging cross-border payments • **Tazama** offers an Open Source Software for a fraud management system for all account-to-account payments

Interoperable

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Data Readiness	A cross-border payment often require additional data elements to meet regulatory compliance or messaging protocols (e.g., ISO 20022 or other). National differences in addressing can be an especially challenging element in a cross-border Scheme and will require focus. Governance mechanisms ensure secure and efficient exchange among DFSPs, as well as information-sharing guidelines or mechanisms, to lower the instance of failed transfers	**Support cross-border data requirements.** Support additional information requirements for all countries reached in the cross-border arrangement. The Scheme should determine the need for any new data to complete the transfer (e.g., addressing, purpose of payment codes, etc.). Having necessary, correct information will minimize incomplete or failed payments – and the cost associated with them. One study estimated 14% of cross-border payments fail and have charges levied with USD $12 being the average fee to repair the transaction. The Scheme should also minimize the passage into or retention of personally identifiable information by the platform. • The US cross-border ACH has an additional set of rules and formats called the **NACHA International ACH (IAT) Transaction Rules,** requiring expanded compliance related information (not included in domestic ACH) • **SADC TCIB** payment system required the development of a simplified set of Balance of Payment reporting codes for correct (and efficient) usage with low value transfers

Inclusive Governance (1 of 2)

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Regulation and Supervision	Cross-border payments are, by definition, multi-jurisdictional, requiring clarity on the requirements for 1) any special handling for sending or receiving payment system to process cross-border payments, and 2) the process for sending and receiving cross-border payments between them Country variations in regulations can impede cross-border payment and providers' ability to fulfill diverse requirements and also to communicate them to their end users. Some regional payment arrangements are evaluating how regulation and supervision aspects can be harmonized	**Have an appropriate oversight mechanism.** Work with the Regulator(s) to determine and put in place an appropriate oversight mechanism for cross-border services. Many regional payment Schemes will have this in place, but it will need to be developed in other regions or less formal payment groupings. • While not regulated by a single entity, **Buna** has a lead overseer: the Central Bank of the UAE has established a Cooperative Oversight Framework exercised by a dedicated Oversight Committee that is open to the Central Banks whose currencies are processed in Buna • Though not itself a regional payment grouping, a multilateral regulatory arrangement was developed for **CLS Bank**, the entity that carries out Continuously Linked Settlement for high-value transactions. The CLS Oversight Committee includes 18 central banks whose currencies are settled in CLS, as well as five national central banks from the euro area.

Inclusive Governance (2 of 2)

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Inclusive Scheme Rules	The multi-jurisdictional nature of cross-border payments implies that a separate Scheme is needed for those aspects of the payment that are *between* the participating jurisdictions. As is the case domestically when there is no ability to provide input, DFSPs are not incented to participate in the cross-border arrangement.	**Adopt favorable FX rates.** Foreign exchange rates are advantageous for the end user. Scheme rules should require that DFSPs that provide foreign exchange should select and apply the rate that is most beneficial to the value of the transaction. Ensuring that foreign exchange rates are reasonable supports the value proposition of the Inclusive IPS and promotes usage. • See **Directo a México** Spotlight section and Guidance on **Transparent Terms** **Encourage participatory rule-making.** Scheme rules for cross-border payments are developed in a consultative, inclusive manner. All participants should be afforded opportunities to comment on all aspects of Scheme design and governance. • The development of the **COMESA Digital Regional Payments Platform (DRPP)** included outreach to multiple stakeholders including all types of DFSPs, regulators (Central Banks, and Information and Communications Technology, Trade, Economic Planning and Finance), fintechs, and business end users (small trader associations, and regional manufacturers that interact with small businesses) to get input on the draft Scheme rules • Similarly, the **TCIB Scheme** was catalyzed through topical work groups with members from DFSPs representing the different SADC countries

Low Fees for End Users

Practice	The Cross-Border Implication	Guidance: • Market Illustrations
Low Fees for DFSPs	Cross-border payments have historically been complicated arrangements and have remained expensive for DFSPs and end users, in part due to the expectations of lucrative margins for commercial providers. When the Scheme offers cross-border payments to DFSPs, it can deliver scale (keeping fees low to DFSPs) and foster competition support (keeping fees low to end users). Sometimes regulation is required to achieve these goals in the cross-border context.	**Keep cross-border fees for DFSPs very low.** The Scheme should take efforts to keep the DFSP fee low so fees to end users can be affordable for this important payment need. Additionally, getting FX should not be a cost factor. The Scheme should make foreign exchange options available, allowing DFSPs to make their own competitive currency conversions or take advantage of a competitive FX marketplace. • Scheme rules can guide end user pricing to ensure affordability. **SEPA** rules require that the cost of a cross-border transfer cannot exceed that of a domestic transfer in the EU • The Central Bank of Nigeria sets maximum fees that banks can charge on a range of services, including foreign exchange and cross-border transfers • The **Ripple** network and **Nexus Global Payments** both ensure competitive rates through a FX marketplace where providers compete to execute transactions • Regulation or Scheme rules can provide comprehensive best execution obligations. Examples are the **EU and the US securities market regulation** found in Financial Instruments Directive II (MiFID II) and the SEC Regulation *Best Execution* and FINRA rule 5310, respectively

Directo a México: Fostering More Competitive Terms

The Banco de México and the U.S. Federal Reserve implemented Directo a México in 2004. Directo a México is a cross-border payment system linking all depository financial institutions participating in the U.S. Automated Clearing House (ACH) to all those connected to the SPEI instant payment system in the receiving country. Though the arrangement is not end-to-end instant (transfers are originated in an ACH), it provides an example of an optional shared service developed for the specific purpose of improving existing market conditions. The arrangement has delivered notable benefits to users.

Per the [Directo a México website](), these benefits include:

- **Low Fees to DFSPs** – transaction fees today ranging from $0.55 to $1.05, depending on monthly volume, plus a monthly account servicing fee
- **Low Fees for End Users –** commission charged by the sending financial institution averages around USD $3
- **Ultracompetitive foreign exchange rates -** based on the FIX* (the official *wholesale* interbank exchange rate into Mexico in USD) less a margin of 0.21%. The same exchange rate applies regardless of the amount transferred OR underlying use case
- **Transparency –** the exchange rate and the original amount in USD appears on the receiver's statement
- **Security –** administered and regulated by the central banks

Translation: "So your money is not lost along the way, send it with Directo México."

U.S. banks that prefer to manage their own foreign exchange have an optional operational process that allows them to "bypass" the ultra-competitive Directo a México rate and settle the transactions via correspondent banking arrangements in Mexico. Although this option does not provide the social good of the exchange rate, it makes the service attractive to different DFSPs and for broader use cases. As usage of Directo a México is not mandated, the option to set the foreign exchange rate incentivizes usage and higher transaction revenue.

*The FIX foreign exchange rate is calculated daily by Bancomext, a national development bank. Bancomext also provides the foreign exchange conversion for Directo a México.

Safe Payments (1 of 3)

Practice	Cross-Border Implications	Guidance: • **Market Illustrations**
Transparent Terms	Cross-border, cross-currency payments are especially susceptible to hidden fees and manipulations which mask markups for end-users, making it impossible for them to understand the true cost of the payment.	**Use shared cost disclosure methodology for all cross-border transfers.** DFSPs disclose the total cost of the transaction using the same formula for informing senders of both fees and foreign exchange costs. The disclosure should be presented to the payer prior to confirming the transfer. Scheme rules should also prohibit beneficiary deductions, which reduce the value when it reaches the payee. Simple, easy to understand and standardized presentation of fees and other transfer costs like FX provides a basis for comparison by end users while helping to increase competition and lower costs. • The **COMESA DRPP** proposes that the total/final/overall cost to the payer is less than 3% of the value of the principal amount. The DFSP will provide a detailed breakdown of costs, including Scheme fee along with DFSP fee and currency conversion charge, prior to initiating the transaction • The regulation that created **SEPA** requires that the cost to send a cross-border transfer cannot be higher than the cost to send a domestic transfer and prohibits the payee's bank from deducting a fee from the amount of the principal • The **US Dodd-Frank 1073 regulation** requires disclosure of terms for all consumer-initiated, cross-border transactions

Safe Payments (2 of 3)

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Transparent Terms	Cross-border, cross-currency payments are especially susceptible to hidden fees and manipulations which mask markups for end-users, making it impossible for them to understand the true cost of the payment.	**Reference and display benchmark FX rate in the disclosure.** DFSPs should calculate total FX cost by referencing the benchmark rate (also referred to as a reference rate, this rate is used to reflect the economic value of currencies and is for informational purposes only) for each currency pair. DFSPs should also display the benchmark rate used in the calculation as part of its disclosure of total FX cost to the end user. The benchmark rate referenced should be the most recent daily rate published for the currency pair by an authoritative source, e.g., the central bank, other government entity, Reuters Reference Rate. In cases where the benchmark rate for the specific currency pair is not published, it should be derived utilizing benchmark rates for each currency using a third, liquid currency. The benchmark rate should be expressed as “1 unit of sending currency = x units of receiving currency”. For example, in the case of Zambian Kwacha (ZK) as sending currency and Malawian Kwacha as the receiving currency, the benchmark rate should be expressed as “1 ZK = 74.3700 MK”. • It is not currently common practice to display the benchmark FX rate in end user disclosures. Adding this practice is expected to contribute meaningfully to end users being able to compare the applied FX rates of different providers (in addition to comparing transaction fees) and as a result, being equipped to select the most favorable offer.

L1

Spotlight

Transparent & Standardized Disclosures

The Level One Project supports the use of a transparent and standardized methodology for disclosing fees in simple, easy to understand terms. This Spotlight recommends how to disclose the cost of all cross-border transactions to end users.

Total transaction costs are often defined as all relevant charges, including sending and receiving fees, fees to any intermediary and currency conversion costs. While the G20 focus on lowering the cost of remittances has resulted in almost all remittance providers providing a breakdown of total fees and currency conversion costs (FSB 2024), comparing options is not easy. This is because users must perform their own investigations to fully understand the cost structure as providers are free to market as they choose, often using deceptive terms like "zero fee" when, in fact, a higher FX rate hides the fee, making it less beneficial to the consumer.

An illustration of a transparent and comparable standardized disclosure for *all* cross-border payments (not just remittances) would list the elements shown on the next page in "Imagining a Standardized Disclosure"; the Scheme rules will define the calculations.

Key to enabling a true comparison is using the same underlying FX rate (i.e., a common interbank rate issued by the central bank, other governmental entity, or a standard like Reuters Reference Rate) before adding a unique mark up or spread.

This will require alignment on both terminology and methodology – neither of which exists today. Where a benchmark or reference rate does not yet exist, It will need to be created.

Regulators and the Scheme should guide DFSPs to target a Total Cost (%) for each transaction that is within the G20 target of 1% for retail payments and 3% for remittances. This guidance does not tell DFSPs what to charge but rather orients the market competitively, toward an inclusive policy objective. Attaining these goals is especially important for payments made by low-income individuals and micro-small businesses.

*Calculations detailed on following slide.

Imagining a Standardized Disclosure

Using a shared cost disclosure methodology for all cross-border transfers, DFSPs should display the total cost of FX transaction as a single value—this value includes all fees, levies, taxes, and FX markup—to the payer prior to the payer confirming the transfer.

We present here a sample illustration of the disclosure. **The illustration shows the components required for a disclosure.** While all components are required to provide a transparent disclosure, we recognize that local market context may influence end user preferences for how the components are presented (which may lead to an illustration other than the one shown here). The exact illustration selected should prioritize end user ease of understanding the total cost of their transaction and enable easy comparison of total cost across providers.

We invite the ecosystem to test end user preferences in order to contextualize the best visual representations of the data that meet users where they are and consider local context, including language and education levels.

Your Transaction Breakdown	
Amount Sent	[amount in sending currency]
Transaction Fees	[amount in sending currency]
Levies and Taxes	[amount in sending currency]
*FX Rate Applied	[value]
Amount Received	[amount in receiving currency]
*Benchmark FX rate	[value]
Total Transaction Cost	[amount in sending currency]
	[percentage of amount sent]

*Shown as “1 unit of sending currency = *x* units of receiving currency”. For example, in the case of Zambian Kwacha (ZK) as sending currency and Malawian Kwacha as the receiving currency, the FX rate applied, and benchmark FX rate should be expressed as “1 ZK = 74.3700 MK”.

Calculating the Recommended Disclosure

The basics of the calculations are shown below. For full details on the different inputs and a working model, see the accompanying Excel spreadsheet in the L1P Reference Library. The examples shown are for illustration purposes. Actual disclosure of the Transparent Terms is expected to be in digital form.

A	B	C	D	E	F	G	H	I
Amount Sent (in SENDING currency)	**Fees Applied (in SENDING currency)**	**Levies & Taxes (in SENDING currency)**	**Foreign Exchange Rate Applied**	**Benchmark / Reference Rate**	FX Markup or Spread on Benchmark Rate*	**Amount Received (in RECEIVING currency)**	**Total Cost (in SENDING currency)**	**Total Cost (% of Amount Sent)**
				X	E – D	A * D	(A + B + C) – (G ÷ E)	H / A

This disclosure calculation methodology shows the post-conversion effect of sending an amount of currency (A), with additional fees and taxes (B + C), at a retail FX rate (D) by applying the benchmark rate (E) to the Amount Received (G). Total Cost (H) of the transaction in *sending* currency value is the Amount Sent (A), Fees Applied (B), and Levies & Taxes (C) net of the Amount Received (G) at the Benchmark Rate (E). Column I shows this Total Cost (H) in *sending* currency as a percentage of the Amount Sent (A).

The Amount Sent (A) is the amount the sender wishes to transfer, and it is net of Fees Applied (B) and Levies & Taxes (C). The sum of A, B, and C is the total billing amount to the sender for the transaction.

*The FX Markup (F), is optional and not used in calculations. It is not shown on the suggested disclosure, though it can be included by a Scheme for additional transparency.

As these calculations are derived from DFSP quotations, they do not dictate or specify rates to FX Providers. Each FX Provider may individually set and apply their own FX Rate and may source their FX currency through any arrangement that supports their business. The disclosure is intended to show the retail effect on the Sender and Receiver in a Scheme-wide consistent way.

Refer to the accompanying Excel file for additional details and examples in calculating the Disclosure.

Spotlight

Example of Standardized Disclosure

Setting: A small trader living in Zambia needs to transfer 100 Zambian Kwacha (ZK) to another small trader in Malawi for goods purchased. She wants to use one of two different digital payment providers that can facilitate the payment.

A clear disclosure of the total cost of the FX transaction as a single value—this value includes all fees, levies, taxes, and FX markup—helps her select the best option.

Provider 1

Higher fees, better FX rate

<table>
<tr><th colspan="2">Your Transaction Breakdown</th></tr>
<tr><td>Amount Sent</td><td>100.00 ZK</td></tr>
<tr><td>Transaction Fees</td><td>1.00 ZK</td></tr>
<tr><td>Levies and Taxes</td><td>0.50 ZK</td></tr>
<tr><td>*FX Rate Applied</td><td>1 ZK = 74.5500 MK</td></tr>
<tr><td>Amount Received</td><td>7455.00 MK</td></tr>
<tr><td>*Benchmark FX rate</td><td>1 ZK = 75.5500 MK</td></tr>
<tr><td rowspan="2">Total Transaction Cost</td><td>2.82 ZK</td></tr>
<tr><td>2.82%</td></tr>
</table>

Provider 2

Lower fees, worse FX rate

<table>
<tr><th colspan="2">Your Transaction Breakdown</th></tr>
<tr><td>Amount Sent</td><td>100.00 ZK</td></tr>
<tr><td>Transaction Fees</td><td>0 ZK</td></tr>
<tr><td>Levies and Taxes</td><td>0.50 ZK</td></tr>
<tr><td>*FX Rate Applied</td><td>1 ZK = 73.5500 MK</td></tr>
<tr><td>Amount Received</td><td>7355.00 MK</td></tr>
<tr><td>*Benchmark FX rate</td><td>1 ZK = 75.5500 MK</td></tr>
<tr><td rowspan="2">Total Transaction Cost</td><td>3.15 ZK</td></tr>
<tr><td>3.15%</td></tr>
</table>

Safe Payments (3 of 3)

Practice	Cross-Border Implications	Guidance: • **Market Illustrations**
Tiered KYC	A growing number of jurisdictions have enabled Tiered KYC requirements that allow customers with no or minimal ID to access the financial system at basic levels. Tiered KYC is fundamental in enabling the poor to participate in the payment system. Accounts or wallets with no or minimal ID can only transact small amounts with a minimal frequency (i.e., velocity) and maintain a modest balance. As KYC on each customer is managed by the DFSP of the payee, the need is to enable DFSPs to seamlessly intersect with cross-border payments.	**Maintain Tiered KYC requirements for cross-border transfers.** Low-value, cross-border transfers are available to end users with basic identification. The Tiered KYC regulation should permit end users to make cross-border payments as a function of their corresponding tier without any additional permissions or steps. • While there are a number of countries with Tiered KYC regulations, the tiers and value limits vary widely. Moreover, most countries do not allow cross-border transfers into low Tier accounts. The Alliance for Financial Inclusion has identified several key challenges for mobile enabled international remittances including different national KYC requirements for international and domestic transfers, variation among requirements in sending and receiving countries, and differing transaction limits by country. This challenge will require much additional focus to be fully resolved. • One promising example is the introduction of a novel concept for low value cross-border payments by the **COMESA DRPP** Scheme. Here, the messaging between DFSPs will incorporate an “agreement of terms” process into the rules that requires the receiving DFSP to indicate to the sending DFSP that the intended account is eligible to receive the value being transferred (among other terms).

Shared Capabilities

Practice	Cross-Border Implications	Guidance: • Market Illustrations
Shared Services	Cross-border payments have additional steps and effort than do domestic payments with additional Scheme development, legal agreements, technical connections, compliance as well as the additional settlement between foreign counterparties, into / out of a foreign jurisdiction. The cost of these efforts is not affordable for most DFSPs on their own but is attainable when the Scheme develops cross-border payments and can share the expense among participants. Harmonization efforts are vastly simplified when carried out at the Scheme level and all DFSPs are operating on the same norms and procedures	**Provide cross-border capabilities to all DFSPs as a Shared Service.** Cross-border capabilities are available to all DFSPs as an optional, Shared Service. This will reduce implementation and operating costs over DFSPs doing this independently and potentially provide an additional source of revenue for the IPS. • A well-known example is **SWIFT**, or the Society for Worldwide Interbank Financial Telecommunications. Founded as a global cooperative in 1973, SWIFT has developed services to enable banks to achieve more in cross-border payments than could possibly be done on an individual basis. Today SWIFT has dozens of optional services, including compliance related options, that members can utilize • **Buna** is a payment system providing a pan-Arab regional clearing and settlement mechanism and is also working to include transfers to Pakistan. The Buna platform features an FX marketplace, multi-currency settlement, fraud detection, compliance checks and sanctions screening, along with transaction monitoring and a payment data repository • **CLS Bank** provides a settlement service in 18 currencies for its member banks

Spotlight

Buna Cross-Border Shared Services

Buna is a regional payment system offering cross-border, multi-currency transfers for participating DFSPs in the Arab region. The Buna platform is the result of regional policy efforts, championed by the Arab Monetary Fund to improve cross-border payments through a comprehensive services portfolio and risk mitigation processes. It began operations in 2020, and is an independent entity, owned by the Arab Monetary Fund.

Today Buna operates in the Emirati dirham, the Egyptian pound, the Saudi riyal, the Jordanian dinar along with the US dollar and the EU euro. DFSPs must maintain and pre-fund settlement accounts for *all* currencies in which they wish to send or receive funds. These accounts are held at the relevant central bank or a designated commercial bank. Approximately 100 DFSPs (and counting) are live on the platform.

The Buna platform today processes mainly commercial or trade payments in the region. It is now working to add P2P remittances by interlinking to the Raast platform in Pakistan.

Buna: L1P in Practice

Technical Architecture: Buna provides cross-border transfers in relevant Arab currencies and key international ones. Foreign exchange is available via an FX Marketplace that links into the transfer system.

Near-Real Time Settlement: Buna is connected to an RTGS settlement system which provides near real-time settlement of Buna cross-border transfers in multiple currencies.

Shared Services: The Buna payment platform provides centralized screening for Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) as well as Fraud Detection.

Fees: In 2025, Buna lowered Scheme fees to DFSPs - in part to make customer payments more attractive as the focus expanded to include more person-to-person remittances. Going forward, Buna expects that 43% of transfers processed will be under the equivalent of $1,000 USD.

Source: Buna presentation

Looking Ahead

Looking Ahead

New domestic instant payment systems are being implemented around the world and hold great promise for improving cross-border payments. **Some IPS have already begun experimenting with the cross-border application of selected use cases and this trend is accelerating, with the support of a range of non-governmental organizations and the expected implementation of Nexus Global Payments.**

In lower income countries – where the Level One Project aspires to improve digital payment systems – progress toward fast, low-cost, transparent cross-border payments has lagged behind more prosperous economies.

As noted by the G20 diagnostic and highlighted in this report, a few fundamental challenges remain as barriers to widespread availability of affordable, efficient cross-boarder payments. Making compliance processes more efficient and lowering fees, especially foreign exchange, will be essential for lowering overall costs and ensuring access for the poor.

According the the FSB, none of the quantitative G20 targets, including the target for cost, have been fully met for retail payments and remittances.

According the FSB, none of the quantitative G20 targets including the target cost (global average cost of no more than 1% with no corridor above 3%) have been fully met for retail payments and remittances. Costs and speed remain above target. Transparency metrics, however, are near to achieving the established goal. These goals are being measured by global average as well as at the regional and or corridor levels.

Additional innovation efforts by the BIS are underway in these areas. Project Mandala **seeks to include a compliance warranty in the process flow of the payment itself and provide a cryptographic proof of the compliance check.** The Mandala concept is flexible enough to program in differing regulatory requirements by jurisdiction and also promotes better data privacy by encrypting data as it transits outside the DFSP environment. Still, Project Mandala is conceptual and will require additional effort and regulatory alignment for it to deliver on expected improvements.

Mojaloop's open-source software, that serves as a reference implementation for an Inclusive IPS, provides a notable example of an innovation in its implementation of a pre-validation tool. Mojaloop's "Agreement of Terms" functionality provides a cryptographic guarantee of payee identity, transaction terms, and agreement to fulfill by the receiving institution.

Looking Ahead (continued)

Project Rialto is another effort that holds potential to lower the cost of foreign exchange in cross-border transactions. Rialto focuses on three prominent, inherent risks (liquidity, credit and settlement risk).

Today, participants in foreign exchange markets must "price in" or hedge against risks. As DFSPs protect themselves against these risks, it adds to the cost of foreign exchange. Project Rialto seeks to minimize these risks by automating foreign exchange conversion and providing tokenized settlement in central bank money (as opposed to commercial bank money as is typically the case).

Rialto would further current guidance extending the notion of Payment versus Payment (PvP) settlement to a broader range of currencies and make it occur instantly. Rialto remains conceptual; experimentation and a proof of concept have not yet taken place.

Lower income countries tend to be more affected by the negative impact of foreign exchange market frictions as their economies are smaller and more likely to experience illiquid currency markets where providers are unable or unwilling to convert currencies at reasonable rates.

Lower income economies are smaller and more likely to experience illiquid currency markets where providers are unable or unwilling to convert currencies at reasonable rates.

In illiquid markets, today's only option is to convert the sending currency into a third, more highly traded currency such as the euro, South African Rand, or US dollar, and then convert the exchange currency into the intended receiver currency. Stablecoins are an emerging option for the exchange currency.

This process is often called "double conversion" and affects many low-income countries. Efforts such as Project Rialto may improve this problem, but are unlikely to solve it, as the challenge of maintaining liquidity in currencies with limited trade or flows of funds is a significant one and is viewed by DFSPs as increasing their costs.

Additional **focus and technology development may be helpful in minimizing the need for double conversion or other persistent challenges but where these are not sufficient, governmental policy focus may be needed.**

Inspired by the early progress of regional IPS, the vision of multilaterally linking Inclusive IPS to enable affordable, convenient, useful payments will remain an objective of the Level One Project. The needs of the poor should be a central concern as the payments industry and the regulatory community evaluate how best to improve cross-border payments.

Additional Resources

Select Additional Resources

A selection of reference reports for deeper study on related cross-border topics.

On Building Better, More Affordable Cross-border / Payment Systems:

- Bank for International Settlements (BIS), Project Rialto: Improving retail cross-border payments with central bank money settlement, last updated 2025
- BIS, Project Aurora: Combating cross-border money laundering using collaborative analysis, 2024
- BIS, Project Hertha: Identifying financial crime patterns while preserving user privacy, last updated 2024
- BIS, Project Mandala: Compliance-by-design architecture for cross-border payment, last updated 2024
- BIS, Project Meridian FX: joint project by the Eurosystem and London Centres, and the Bank of England, to test synchronised settlement in FX, last updated, 2024
- BIS, Project Nexus: Enabling instant Cross-Border Payments:, last updated 2024
- BIS, The organisation of digital payments in India – lessons from the Unified Payments Interface (UPI), 2024
- BIS, Considerations for the use of stablecoin arrangements in cross-border payments, 2023
- Banco Central do Brasil, Pix Management Report: Conception and first years of operation, 2023
- Duke Financial Economics Center, Enhancing Efficiency in Cross-Border Payments: Harmonization of Regional Payments Area Through a Single Rule Book, 2022
- International Monetary Fund (IMF), IMF and World Bank Approach to Cross-Border Payments Technical Assistance, 2023
- UNCDF, A Policymaker's Guide to Enabling Low-Value Remittances in Cross-border Payment Systems, 2024
- World Bank, Open-Source Technologies in the Context of Fast Payment Systems, 2025
- World Economic Forum, Unlocking Interoperability in Cross-Border Payments, 2023

Select Additional Resources (continued)

A selection of reference reports for deeper study on related cross-border topics.

On Data Standards & Transparency:

- CPMI, Harmonised ISO 20022 data requirements for enhancing cross-border payments – final report, 2023
- Financial Stability Board (FSB), Recommendations to Promote Alignment and Interoperability Across Data Frameworks Related to Cross-Border Payments: Consultation report, 2024
- Wolfsberg Group, The Wolfsberg Group Payment Transparency Standards, 2023
- Wolfsberg Group, Response to the FSB Consultations, 2024

On Foreign Exchange (FX) & Risk:

- BIS, Supervisory Guidance for Managing Settlement Risk in Foreign Exchange Transactions, 2013
- Center for Global Development, Why Multilateral Development Banks Are So Far from Their Potential, no date
- World Bank, The Parallel Exchange Rate Problem: The World Bank's Approach (2023)

On the High Cost of Cross-Border Payments (all from FSB):

- Enhancing Cross-border Payments: Stage 3 roadmap, 2020
- G20 Targets for Enhancing Cross-border Payments, 2021
- G20 Roadmap for Enhancing Cross-border Payments consolidated progress reports: 2021 report, 2022 report, 2023 report, and 2024 report

Deeper Dives on Cross-Border Fees

- GSMA, Cross-Border Mobile Money Remittance Cost Survey: Key Trends and Insights, 2024 report