



Mobile Money Transfer

International Remittance Service Providers

An overview of mobile International Remittance Service Provider service offerings

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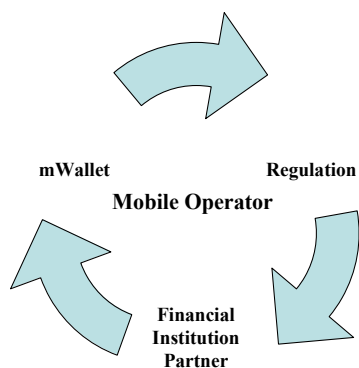
1 An Introduction to Mobile Money

Mobile Money presents a significant opportunity for Operators to develop new revenue through uplifted ARPU. More significantly there has been a dramatic reduction in churn documented from Operators who have deployed Mobile Money offerings resultant from tying a consumer's mobile to their bank account.

Figures from the Philippines published in a World Bank and GSMA paper, documented a churn reduction from 3% to 0.5% for Mobile Money customers¹. While ARPU uplift has not yet been publicly quantified, much can be inferred by the existence of public mobile money strategies for the large Operator groups that cover developing markets.

The Mobile Money Ecosystem

There are three main requirements for Operators to offer Mobile Money services; enabling technology, enabling regulatory environment and subsequent financial institution partner.



mWallet

The enabling technology piece is the least complicated and is referred to as a mobile wallet or mWallet.

mWallet definition:

An mWallet is essentially an aggregator of payment instruments. It is a data repository that houses consumer data sufficient to facilitate a financial transaction from a mobile handset. It also includes the relevant intelligence to translate an instruction from a consumer through a mobile handset/bearer/application into a message that a financial institution can use to debit or credit bank accounts or payment instruments.

An mWallet includes functionality such as:

- Authentication of the consumer
- Storage of billing and shipping addresses
- Storage of details of bank account, payment card, payment purse or any other payment instrument
- Storage of transaction history
- Integration to a bank, perhaps through a financial switch, for purchase, payments and transfers

¹ Micro-Payment Systems and their Application to Mobile Networks, World Bank Infodev, 2006 – http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2006/03/02/000090341_20060302161443/Rendered/INDEX/352950infoDev1m1Commerce01PUBLIC1.txt

Regulation

Regulation presents a significant challenge as the Operator needs to form a relationship with a non-traditional partner, the Financial Regulator. The regulatory environment often dictates the required relationship with a Financial Institution which is the third component of the Mobile Money ecosystem.

MNOs offering Mobile Money services will be exposed to compliance requirements from the Financial Regulator. As such an Operator may require a banking partner or obtain a banking license to meet this compliance requirement; however this is assessed by the Financial Regulator in each market. The GSMA recommends engaging the relevant regulator as soon as possible. This is discussed in a separate paper.

Note: According to the EU Payment Services Directive, Operators have the opportunity to provide payments and therefore to offer basic Mobile Money services. The deadline for implementation of this Directive across the European Union was November 2009.

Financial Service Provider

As outlined above, partnership with a Financial Institution is a potential requirement in many markets around the globe. Each party brings different skills, which together are required to offer Mobile Money products. Specifically, an Operator’s major assets include brand and distribution while Financial Institutions bring compliance and product knowledge.

What each party brings

Mobile Operators	Banks
<ul style="list-style-type: none"> ■ Untapped customer base (un-banked, prepaid, immigrants) ■ Corporate customers (also kiosks at large construction sites; Bundled Package) ■ Customer registration for mobile component (link account to mobile) ■ Strong branding ■ Mobile application and first mile automation ■ Support/customer care for mobile applications ■ GSM network ■ Retail outlets and top-up points of presence 	<ul style="list-style-type: none"> ■ Banking infrastructure (card mgmt etc) ■ Retail outlets ■ Regulatory compliance, regulator comfort ■ Regulator reporting ■ Bank accounts for consumer and ensure KYC for bank accounts ■ Connection to MCW ■ Facilitate Forex, clearing and settlement ■ Provide cash-in/out facility

The GSMA believes that mobile money services need to be developed and deployed rapidly. Changing the regulatory regime in a market to mitigate the requirement for a Financial Institution partner will take a significant investment of time and resource. Therefore, in parallel an Operator should bring a product to the market in partnership with a Financial Institution if regulation is a barrier.

Mobile Money Transfer

The global formal remittance market is estimated by the World Bank to be valued at \$375 billion US, of which over 75% flows into developing countries. Mechanisms for moving cash across borders are well established, including international bank transfers and services offered by such organisations as Western Union and Moneygram.

The Power of Mobile in Remittances

The GSMA forecasts that the 'formal' global remittance market could be over \$1 trillion in five years, across 2 billion consumers, with the help of mobile services. Operators meanwhile, would also benefit from increased customer loyalty and network traffic, reduced churn rates, and a share of fees.

Mobile can achieve this through two distinct advantages over traditional money transfer businesses; access and cost.

Access

A 2006 World Bank report approximated there were only 0.5 million bank branches globally and only 1.4 million ATMs, compared to more than 1.7 billion subscriptions worldwide at the same time. Since then the number of mobile subscriptions has risen to 3.5 billion in Q1 2008 and is forecast to rise to 6 billion by 2012.²

Unsurprisingly, geographic branch and ATM penetration is lowest in developing markets while mobile subscription growth rates are at the highest level in these markets.

Country	Bank Penetration (%)	Geographic Branch Penetration	Geographic ATM Penetration	Mobile Penetration (%)	Mobile Subscription Growth Rate
Ethiopia	14	0.28	—	1	55
Zambia	15	0.21	0.09	33	60
Ghana	16	1.43	—	61	65
Guyana	20	0.12	0.25	9	174
Uganda	20	0.67	0.9	16	71
Nepal	20	2.96	0.15	21	46

Source: World Bank, Wireless Intelligence

Note: Bank account penetration refers to the number of households with access to a bank account. Geographic branch (ATM) penetration refers to the number of branches (ATMs) per 1,000 square kilometres. Note that bank penetration refers to households with access to banks accounts where mobile penetration refers to individuals with access to mobiles.

In 2007, there were 12 million Pakistanis – 7% of the population – living and working overseas. At the same time there were only 1 million people within the country holding a bank account. In comparison, there were 70 million mobile subscribers and continuing to grow significantly, reaching 99 million mobile subscribers by end of 2008 with an annual growth of almost 25%.

Specialist remittance service providers such as Western Union, with over 350,000 points of presence, targeted to the relevant segmentation, address this issue to a degree. However, the high costs associated with maintaining this type of distribution network create another significant entry barrier for consumers.

Cost

Industry estimates place the average cost per transaction at 15% of the remitted value, increasing to over 25% for remittances below \$100. This cost is driven primarily by the overheads associated with the maintenance and agent incentives of a distribution network.

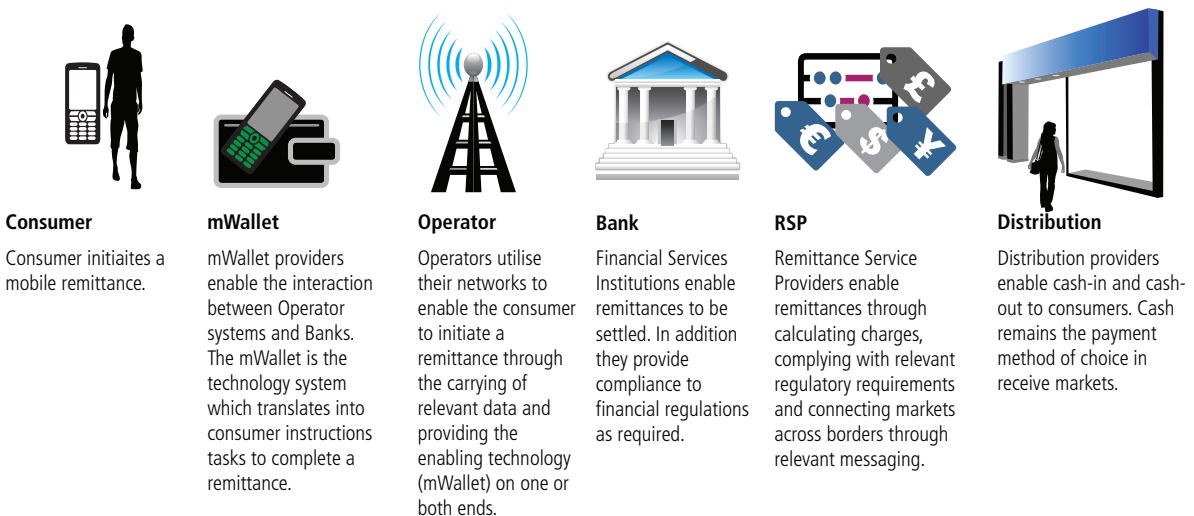
Mobile technology can lower the cost of remittances as it removes the need for physical points of presence and ensures a timely and secure method of transaction. While cash out is still important in an e-cash model, the addition of bill payment and mobile top-up as product offerings within the mWallet allows consumers to access a greater services without the need to cash-out.

The long-term benefits of a unified approach involving mobile are tremendous. The World Bank estimates that reducing remittance commission charges by 2-5% could increase the flow of formal remittances by 50-70%, boosting local economies.

2 Mobile Remittance Ecosystem

In an earlier chapter, we identified three key players in mobile money; Operators, Financial Institutions and the enabling technology. In addition we reviewed the role of the in-market Regulator in defining the Operator/Bank relationship.

To offer a mobile remittance product an additional player, a Remittance Service Provider (RSP), is required. The diagram below shows the ecosystem and roles associated with each player.



The focus of this whitepaper is on the Remittance Service Provider and as such, the following sections explore the elements of a remittance service. In addition this chapter will introduce three mobile remittance use cases and explore the way each element's role changes according to the use case.

However, it is important for Operators to understand the ecosystem, as each RSP solution may offer additional elements of the value chain. For example, some RSPs may be able to supply an mWallet or alternatively an RSP may be able to supply the bank partnership, depending on the solution.

Mobile Remittance Use Cases

Mobile remittances have three use cases:

- Mobile to mobile
- Mobile to cash
- Cash to mobile

The mobile to mobile use case is a purely an electronic remittance which originates from the send consumer's mWallet and terminates in a receive consumer's mWallet, in a different market. This presents the lowest cost to the consumer as the distribution costs are removed on either end.

The mobile to cash use case originates from a consumer's mWallet and terminates at a cash-out point in a different market.

The cash to mobile use case originates from a cash-in point and terminates in the receive consumers mWallet in a different market.

Remittance Service Elements

The Remittance Service Provider (RSP) value chain has three main layers; Messaging, Settlement and Distribution. Each of these element's roles will vary depending on the remittance use case; mobile to mobile, mobile to cash or cash to mobile. This chapter will define the layers and explore the changing roles within the use cases.

Messaging

The messaging layer is the simplest component of a remittance service provider model. The role of the messaging layer is to facilitate the movement of the required information to enable a consumer to remit funds.

To achieve the above, the messaging layer must:

- Determine the receive consumer by the MSISDN
- Complete compliance checks, such as Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT)
- Store the relevant Know Your Customer (KYC) information that the sending party is required to collect
- Calculate and communicate the charges to the consumer across foreign exchange and transaction fees
- Remunerate the other members of the value chain according to contractual obligations

In addition the messaging layer must determine which of the three use cases of mobile remittance the transaction is; mobile to mobile, mobile to cash or cash to mobile.

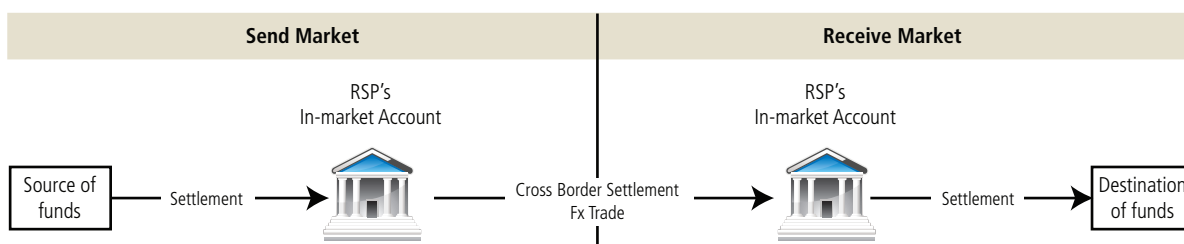
To do this, the messaging layer of the RSP determines the country of the receive consumer as well as the Operator that the receiver is with. This is critical as the RSP can then determine whether the receive consumer's Operator has an integrated mWallet and thus the use case of the remittance. Once the RSP understands the use case, it can then execute the necessary steps to complete the transaction.

Settlement

Settlement is the movement of remitted funds from the consumer in the send market to the consumer in the receive market. Settlement must be completed by Financial Institutions licensed to move money cross border.

There are two models for settlement in mobile money transfer; the in-market RSP settlement account model and the fixed-market RSP settlement account model.

In-market RSP Settlement Account Model

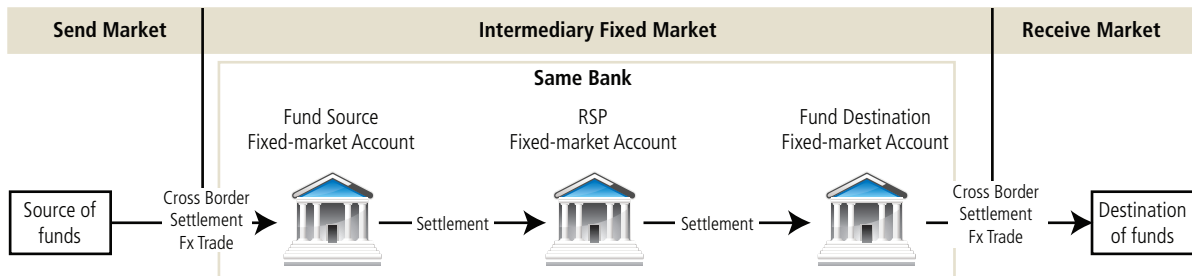


The in-market RSP Account model is the most common settlement process used by RSPs and offers the Operator the advantage of managed foreign exchange risk. However, this management of the foreign exchange risk costs the Operator in the form of a risk adjusted wholesale rate discussed in a later chapter.

In this model the Remittance Service Provider (RSP) holds a remittance settlement account in every market it has a license to transfer money to or from.

To execute a transaction, the RSP receives or draws funds into the remittance settlement account in the send market. The RSP then transfers the money cross border from the send market remittance settlement account to a remittance settlement account held in the receive market, executing the necessary foreign exchange trade. The RSP is then able to settle funds to the destination in-market settlement account to complete the transaction.

Fixed-market RSP Settlement Account Model



The fixed-market RSP settlement account model offers the Operators an opportunity to manage their own foreign exchange risk and derive the associated value from this. This is further discussed in a later chapter.

In this model, the RSP holds one fixed settlement account located in a market with a highly traded currency. Each fund source is required to hold an account in this market with the same bank.

To execute a transaction, the source of funds executes a cross border settlement, through their choice of financial institution, from their in-market settlement account into their fixed-market settlement account in the selected bank of the RSP.

The RSP then receives or draws a settlement from the source of funds fixed-market settlement account to the RSP fixed-market settlement account. The RSP settles the funds into the destination of funds fixed-market settlement account. The destination of funds is then free to complete the transaction at will by executing a cross border settlement into their in-market settlement account, through their choice of financial institution.

Pre-funding

Pre-funding is the maintenance of a float in the Operator settlement accounts at the RFP. The amount of the float is dependent on the magnitude of net receive or net send Operator transfers. Pre-funding the settlement account on either end of the transfer enables the RSP to draw or receive funds instantaneously.

This instantaneous clearance of good funds enables the RSP to authorise the receive Operator to disperse funds instantaneously. However, the funds may only settle to the receive Operator at transaction plus 2 days depending on the settlement model.

In both models pre-funding may be required to ensure instantaneous, or near instantaneous delivery of funds, alternatively the Operator can obtain a line of credit. Both methods have associated costs which the Operator must build into their business models.

In the fixed-market RSP settlement account, pre-funding can present a challenge for Operators through the associated foreign exchange risk. This risk arises from the need to float a value in the fixed market location of the RSP, exposing the Operator to daily currency fluctuations. However, this model is currently used by Operators for roaming settlement and is well understood.

Distribution

The goal of the GSMA is to support the development of e-commerce environment through the use of mWallets for receiving funds to make remote and present payments. However, cash remains the trusted and most prevalent form of payment. To this end a distribution network to cash-in or cash-out value from the mWallet is essential for customer adoption of mobile money services.

Further, a distribution network enables cash to mobile or mobile to cash use cases, broadening the reach of the remittance product. Remittance Service Providers may have a developed agent network or the Operator can use its own agent network to build distribution.

Operator Enabled Distribution

For an Operator to utilise its distribution network for mobile money services it must be clear what strategic role the distribution network will play. The requirements for an agent to cash-in/out remittances are very different to those to allow an agent to play a broader role such as deposit taking.

For an Operator to offer cash-in/out for a remittance product it is likely to require a Money Transfer License dependant on local regulatory requirements. This requirement is not necessarily a large investment in time or resources however, there are training requirements for Agents which must be factored into the decision to enable the channel.

For the Agent to play a broader role, the Operator will need to seek approval of the Financial Services regulator in market and may well need to seek partnership from a bank to facilitate such services.

CGAP released an excellent focus note on enabling banking services through non-bank locations. The paper includes an analytical review of the activities that can be offered, markets which have enabled this to date as well as an investigation into the Agent commission structure.

The focus note is called *Banking Through Networks of Retail Agents* and is available through the CGAP website www.cgap.org.

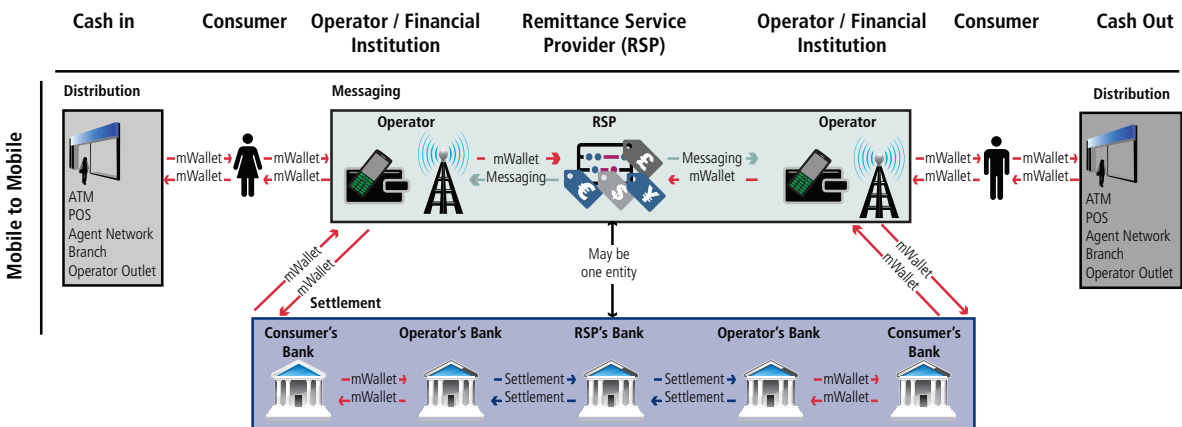
RSP Elements across Mobile Money Transfer Use Cases

As outlined above, the role of the RSP varies according to the three use cases for mobile money transfer:

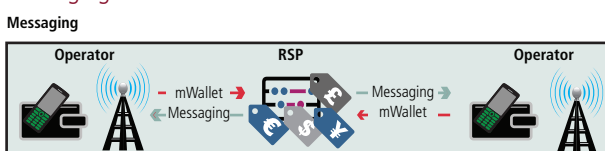
- mobile to mobile
- cash to mobile
- mobile to cash.

The following section outlines the role of each of the RSP elements across the use cases defined above.

Mobile to Mobile



Messaging



The messaging layer for a mobile to mobile transfer is relatively simple. The RSP will receive a request for a remittance from a consumer’s mWallet. The mWallet passes along all the required information such as the sender Know Your Customer (KYC) information, the recipient (identified by the MSISDN) and the transfer amount.

The RSP sends back a confirmation of the amount, an outline of the costs to transfer and the final amount the recipient will receive. The mWallet interaction with the consumer provides the final approval of the transaction allowing the RSP to carry out the necessary Anti-Money Laundering (AML) checks.

Finally the RSP to instantaneously alert the recipient that the funds are in the receive mWallet and available for use. The receive mWallet confirms the receipt of the transfer from the RSP and the remittance messaging is complete.

Settlement



For a mobile to mobile remittance the settlement role of the RSP begins when a remittance request is received from the consumer’s mWallet, outlining the amount to transfer. The RSP then receives or draws the send Operator’s account this value and credits the RSP’s settlement account.

The RSP then credits the receive Operator’s settlement account with the remitted value, minus the associated costs determined by the messaging layer. The receive mWallet completes the transaction by settling with the consumer.

Distribution



Distribution in mobile to mobile remittances is not as critical as the other two use cases as the mWallet holds the potential for consumers to make a number of purchases electronically. However, cash remains the primary method for payments in low income receive markets and as such a distribution strategy is important.

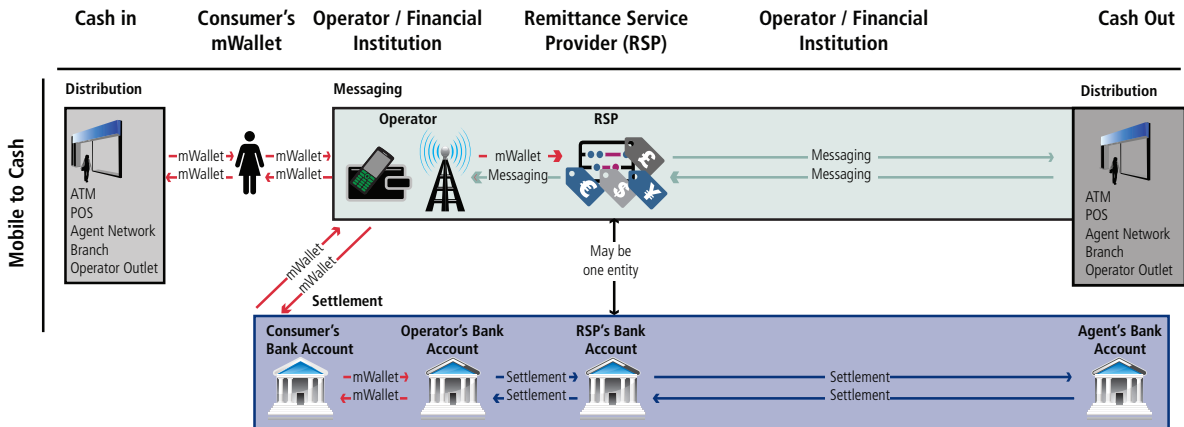
In the mobile to mobile model, the Operator can enable their own distribution network for cash in or out depending on meeting the regulatory requirements outlined earlier in the chapter. Alternatively the Operator can develop a distribution network through partnership with relevant retail outlets or inherit the distribution from the RSP should this exist.

The distribution network on either end serves to enable consumers to add or take out stored value from the mWallet. A remittance can be sent without a distribution network however, the consumer proposition is more challenging.

International Remittance Service Providers

An overview mobile International Remittance Service Provider service offerings

Mobile to Cash



Messaging



In the mobile to cash use case the RSP is responsible for more the messaging layer. The cash in point must be connected to the messaging layer of the RSP. The cash in point initiates a transaction on the RSP messaging layer, providing all the necessary compliance information such as KYC information, the recipient (identified by the MSISDN) and the transfer amount.

The RSP sends back a confirmation of the amount, an outline of the costs to transfer and the final amount the recipient will receive. The cash-in point provides the detail to the consumer for approval of the transaction. The RSP then executes the necessary Anti-Money Laundering (AML) checks.

Finally the RSP instantaneously alerts the recipient that the funds are in the receive mWallet and available for use. The receive mWallet confirms the receipt of the transfer from the RSP and the remittance messaging is complete.

Settlement

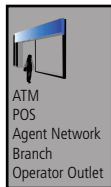


In the cash to mobile use case, the settlement role of the RSP begins when a remittance request is initiated at an Agent location. The Agent may be franchised by the RSP or simply connected into the solution.

The RSP receives or draws the sending value from the Agent's settlement account into the RSP's settlement account. The RSP then credits the receive Operator's settlement account the remitted value, minus the associated costs determined by the messaging layer. The receive mWallet completes the transaction by settling with the consumer.

Distribution

Distribution

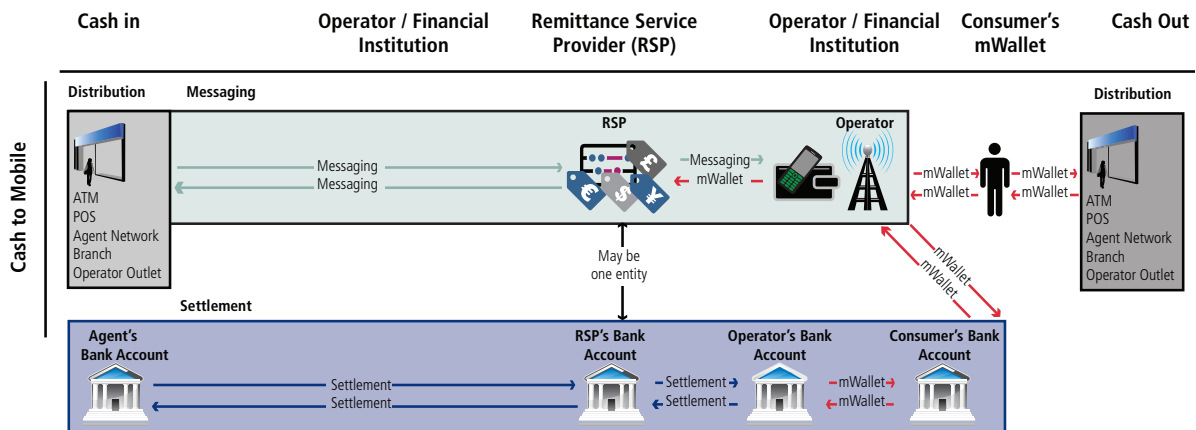


The mobile to cash use case requires distribution on the send side at a minimum. The distribution network serves as the initiation point for the transfer and as such does not necessarily require an Operator on the send side. If the RSP has a distribution network or connects to a Retailer's network, a transfer can be initiated in this market.

This is an important consideration for Operators located in primarily receive markets, and interested in offering a mobile remittance product. The success of the product will depend on the solution being available in the major corridors that terminate in the Operator's market.

Initially, while the number of mobile money solutions being implemented is growing, the number of initiation markets from a mobile to mobile perspective will be limited. In this situation the success of the product may depend on the ability to initiate from cash.

Cash to Mobile



Messaging

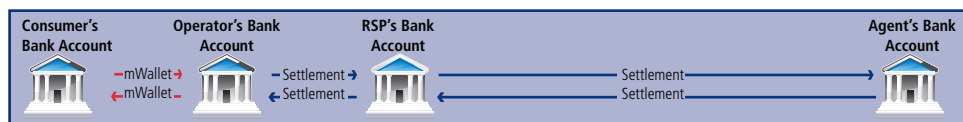


The messaging layer for the mobile to cash use case is similar to the previous example though inverted. The initiation of the transaction is now the mWallet of the Operator's consumer, which sends the required information such as the sender Know Your Customer (KYC) information, the recipient (identified by the MSISDN) and the transfer amount.

The RSP returns to the mWallet a confirmation of the amount, an outline of the costs to transfer and the final amount the recipient will receive. The consumer uses the mWallet to give final approval which enables the RSP to execute the necessary Anti-Money Laundering (AML) checks.

The RSP then logs the transfer on the distribution systems to enable the receive consumer to approach a distribution point and receive the funds. The consumer will validate their identity through the agent, who will confirm the cash-out of the funds on the system.

Settlement



In the mobile to cash use case, the settlement role of the RSP begins when a remittance request is received by the send consumer's mWallet. In this case, the mWallet facilitates the settlement from the consumer's account into the Operator's settlement account.

The RSP settlement role begins with the receipt or draw of the sending value from the Operator's settlement account into the RSP's settlement account.

The RSP holds the funds until the receive consumer decides on an Agent to cash-out. The RSP then credits the Agent's settlement account the remitted value, minus the associated costs determined by the messaging layer.

Distribution



As in the previous case, the cash to mobile use case requires a distribution network to enable the transaction. The distribution network serves as the termination point for the transfer and as such does not necessarily require an Operator on the receive side.

If the RSP has a distribution network or connects to a Retailer's network, a transfer can be terminated in this market.

This is an important consideration for Operators located in primarily send markets in this use case. The success of the product may depend on the ability to cash-out in the receive markets.

Again, while the number of mobile money solutions being implemented is growing, the number of termination markets from a mobile to mobile perspective will be limited, potentially requiring a distribution network to disperse funds.

3 Remittance Service Provider Models

This chapter explores the Remittance Service Provider models in the market. There are two distinct models in the market, each encompassing differing elements of the value chain. In both models the RSP will rely on the financial services system for the settlement of funds as outlined in an earlier chapter.

Messaging Only

Messaging only models offer the technological layer that manages the remittance from initiation, either at an Agent or through an mWallet, through to the completion at an Agent or receive mWallet. As outlined above, this requires the RSP to:

- Determine the receive consumer by the MSISDN
- Complete compliance checks, such as Anti-Money Laundering (AML), Combating the Financing of Terrorism (CFT)
- Store the relevant Know Your Customer (KYC) information the sending party is required to collect
- Calculate and communicate the charges to the consumer across foreign exchange and transaction fees
- Remunerate the other members of the value chain according to contractual obligations

This model is the simplest for an RSP and presents an opportunity for Operators to capture more of the value chain through leveraging or extending its own distribution channel. This presents value to the Operator through managing the distribution costs and thus making margin from the cash-in/out component of remittance.

However, there are challenges with owning and operating the distribution network. On the regulatory side there is likely to be obligations Operators must comply with before being able to utilise the distribution network for cash-in/out as discussed earlier in this paper.

Further, Operators face a challenge when it comes to remunerating the existing distribution channel for remittances. Traditional pre-pay commission structures are between 8-24% however, to achieve the industry goal of dramatically reducing the cost of remittance; such a commission structure is not possible. Distribution agent support is essential to encourage consumer adoption and as such this requires Operators to carefully consider how to enable the distribution network.

A challenge for the Messaging only RSP model is that it is the Operator's responsibility to source the distribution model. In addition as the RSP does not provide a distribution network, the Operator is reliant on other Operators in their key send and receive markets to sign up to a mobile money product and enable a distribution network. Alternatively, the Operator can partner in their key send and receive markets to build a distribution network.

Messaging and Distribution

Mobile Remittance models that feature messaging and distribution offer the advantage of one partnership providing the complete solution. There are many differing distribution models available from remittance service providers. It is important for Operators to understand the distribution network brought by the RSP.

One key advantage of an RSP with a distribution network is the reduction in compliance requirements for an Operator, and the ability to implement with one solution provider and reach all the RSPs distribution points, which may be global – as with Western Union.

The challenge with a Messaging and Distribution model is that the RSP owns more of the value chain and will need to be compensated for this. This is especially important for the distribution network, due to the challenges highlighted above.

Revenue Share Models

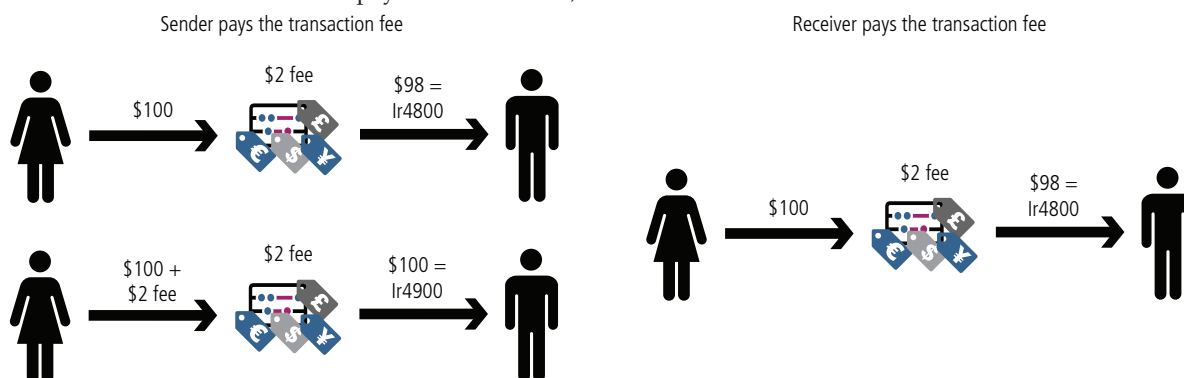
Revenue is derived from an international remittance in two ways; a transaction fee and a margin applied to foreign exchange rates referred to as foreign exchange spread. Consumers assess the cost of a remittance differently in each market depending on market forces. In different markets a consumer may compare foreign exchange rates to determine the best provider or alternatively the consumer may compare the upfront transaction fee.

Transaction Fee

Transaction fees are well understood by consumers and represent the visible cost of sending a remittance. Generally the fee is paid for by the sender, though it may be paid by the receiver in some models.

In the model where a sender pays the transfer fee, there are two options for the consumer. The fee can be taken from the remitted value, reducing the amount the receive consumer collects, or alternatively the fee can be added to the remittance amount fixing the amount the receive consumer collects.

In the model where the receiver pays the transfer fee, this is subtracted from the remitted amount received.



Foreign Exchange

Foreign exchange is less well understood by consumers in the majority of markets and more difficult to quantify in terms of the cost of a transaction. As such there are a number of models proposed by Remittance Service Providers (RSPs).

It is important to be aware that foreign exchange can create varying levels of revenue dependant on how the RSP sources their foreign exchange capability. Market forces will determine the appropriate cost structure for consumers, as outlined above however, the margin or spread, on foreign exchange will depend on the base rate the RSP can provide.

Operators should understand the differing components of a foreign exchange rate to maximise revenues from international remittances.

Overview of the Foreign Exchange Market

The foreign exchange market traded \$3.2 trillion per day in April 2007 according to the Bank for International Settlements, an increase of over 60% from three years previous.³ The market is not centralised, meaning that foreign exchange trades are not publicly recorded; rather the information is kept proprietary to the firm executing the trade.

The primary firms who offer prices to buy and sell currencies, termed market makers, are global banks buying primarily for their own purposes, or on behalf of clients⁴. This Interbank foreign exchange market makes up 43% of trades, or \$1.38 trillion per day⁵.

³ 2007 Triennial Central Bank Survey. Bank for International Settlements. Available: <http://www.bis.org>

⁴ Kathy Lien. The Foreign Exchange Interbank Market. Available: <http://www.investopedia.com/articles/forex/06/interbank.asp>. Last accessed 27 Jan 2009.

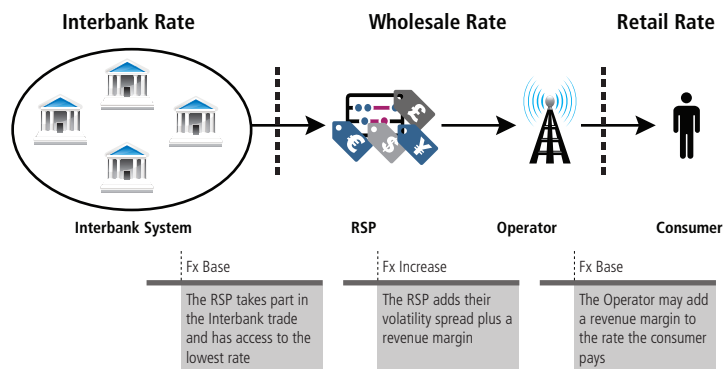
⁵ 2007 Triennial Central Bank Survey. Bank for International Settlements. Available: <http://www.bis.org>

The rates available on the Interbank system, to both other banks and to foreign exchange companies, is dependent on the credit approval that exists between the selling bank and the buying company. In effect this means that larger banks and foreign exchange companies have access to lower rates to buy currencies.

Wholesale Foreign Exchange Rates in RSP Models

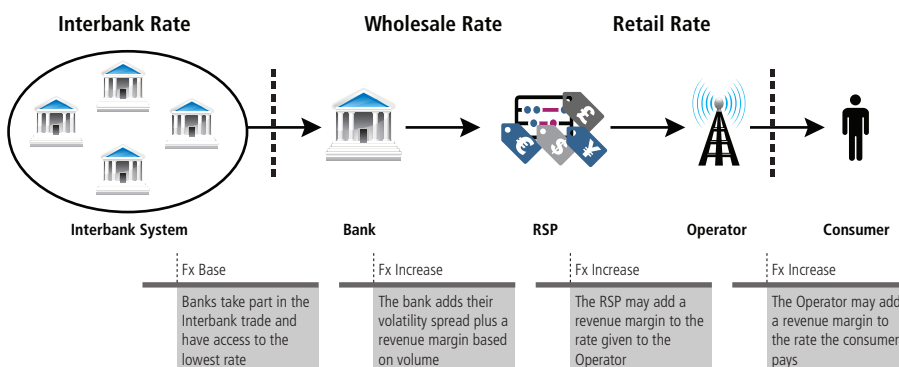
Most RSP offer a wholesale rate to the Operator as well as the ability to add a margin or spread to this rate before offering it to the remittance consumer. Wholesale rates may be calculated differently by the RSP according to the business model and currency purchasing power of the RSP.

For example, a wholesale rate on offer from an RSP may be based directly on the Interbank rate and include a spread to fix the foreign exchange rate for a determined period. This spread would cover the margin for the RSP and the volatility adjustment for setting a foreign exchange rate for the fixed period. This would present the lowest wholesale rate available to Operators and depends on the RSP having access, and the requisite relationships in place to participate in the Interbank system at a scale which drives low rates.



Alternatively an RSP may source the foreign exchange rate from a participant in the Interbank system, such as a bank partner. In this case the bank partner of the RSP may well offer the RSP a wholesale rate based on the volume of foreign exchange trades completed with the bank partner.

The wholesale rate in this example could involve two margin adjustments; one the spread from the previous example to cover volatility and the high volume component of the bank partner margin, the second an additional margin added by the bank partner based on the relationship and volume between the RSP and the bank partner.



In both examples, Operators need to baseline the foreign exchange rate against the Interbank rates and understand which players are deriving revenue from the model. In that way Operators can build a revenue driver while still ensuring an attractive customer proposition. Additionally Operators can understand the true revenue the RSP receives from a transaction.

4 Considerations when selecting an RSP partner

When selecting the most appropriate Remittance Service Provider (RSP) partner, in addition to understanding the offering across the elements above, it is important to assess the solution across a number of elements:

- Solution Architecture
- Geographic Presence
- Regulatory Compliance
- Deployment Strategy
- MNO Engagement Model
- Framework Revenue Share Model

Solution Architecture

Solution Architecture refers to the technical capabilities of the RSP solution. There are a number of important elements Operators should consider. Below is a list of requirements that Operators should ensure the RSP is able to meet:

Requirement
International remittance time from consumer to consumer must be instantaneous. The receiving consumer must be able to cash-out immediately.
Sender response to instruction must be instantaneous with transfer values, charges and rates
Interbank cross boarder settlement must occur at least daily
A standard API must be publicly available to enable technology vendors to integrate their mWallets solutions into.
The following transactions must be supported: cash to mobile, mobile to cash and mobile to mobile
The solution must be interoperable. It is required that the hub be willing to interconnect with other hubs in the market to initiate and terminate transactions
Settlement process: Outline the connection into settlement bank accounts
Settlement process: Outline the authorities required to extract or credit funds
Settlement process: Explain where accounts will be held, either on the Operators books or those of the hub.
The solution should accommodate stored value capability
The solution should accommodate banking account systems including credit and debit cards
The solution would benefit from offering international air time top up

In addition, to ensure the RSP solution is mobile centric there are a few other criteria worth considering in the Solution Architecture:

Requirement
The solution must use the MSISDN as the unique identifier for all transactions as mandated by the industry
The solution must use the mobile phone to initiate the transaction in send markets and at least notifying the recipient in receive markets
The solution must use the Operators brand
The solution uses Operators distribution channel, where regulatory environment allows and Operator's wish to enable this
The solution should use third parties as the distribution network, pending Operator requirements
The solution will support the adoption of a global mobile industry service mark that will highlight interoperability and work to meet interoperability requirements defined by the industry

Geographic Presence

The geographic presence of the RSP solution will be a critical decision factor for Operators. Each market, be it send or receive, will have key markets that transactions will flow into or from. As such the Operator needs to understand which markets the RSP is able to serve.

Global presence brings the greatest advantage to Operators as consumer behaviour may change or the mobile channel may stimulate unexpected corridors for transactions.

There are two main areas that Operators should investigate with potential RSP partners:

- Understand the markets the RSP is able to serve, including the size of distribution network in each market
- Understand the RSPs proposal to offer services to those markets, including partnerships with other RSPs

Should the RSP have partnerships with other providers to cover off key markets, it is important to understand the nature of the partnership, the implications on service, and the cost to both the Operator and the consumer. Further, the Operator should establish whether their RSP is planning to expand into markets that are not currently served, or markets which are served by the RSPs partners.

Regulatory Compliance

To transfer money cross border, an RSP is required to comply with the financial requirements in each market they serve. In addition there are stringent compliance requirements such as those to prevent Anti-Money Laundering (AML) and Counter Financing of Terrorism (CFT) according to global Financial Action Task Force (FATF) standards.

Operators must understand the regulatory implications of being involved in a cross border remittance as well as who is liable for meeting the compliance requirements in partnership with the RSP. Below is a non-exhaustive list of requirements Operators should understand while selecting an RSP partner:

Requirement
The solution must meet AML and CFT requirements as defined by the global FATF standards
Outline which regulatory compliance responsibilities are carried by the hub including who carries the risk of non-compliance to AML/CFT
Outline which regulatory compliance responsibilities are carried by the MNO
Explain the signing up process, i.e. responsibilities in terms of payment regulation from initiation to the completion of a commercial money transfer
Identify who holds the Money Transfer License, required by the majority of markets, to initiate or terminate a remittance

Deployment Strategy

The deployment strategy of the RSP presents two separate considerations; firstly the Operator can identify the strategic importance of the mobile channel to the provider and secondly the Operator can understand how the RSPs deployment strategy aligns with the Operator's key corridors and mobile money strategy.

This latter is important to deliver mobile to mobile remittances as it will require the RSP to partner with an MNO in their key send or receive markets to enable that. As such it is important for the Operator to approach the relationship as a partnership.

Key areas for the Operators to explore are:

- Investment required/made to date by the RSP
- Partnerships engaged or required to deliver market, including an outline of the engagement model with the partner
- Strategic roll out plan of the RSP across key Operator send or receive markets
- Resource requirements
- The proposed or implemented solution architecture

MNO Engagement Model

As discussed above, each RSP model will require Operators to own and deliver different elements of the remittance service. Additionally the RSP solution may require Operators to have existing relationships or deployments in place before a commercial arrangement can be executed. These requirements typically tend to be an mWallet deployed to consumers and a bank partnership to meet compliance requirements, should the regulatory body deem this necessary.

However, as mentioned in an earlier chapter, it is possible that the RSP is able to bring one or both of the elements as part of their solution. This is an important element that may help the Operator bring the product to market more rapidly.

Also important is for the Operator to understand the RSP's engagement process from contract to deployment and ongoing support.

Framework Revenue Share Model

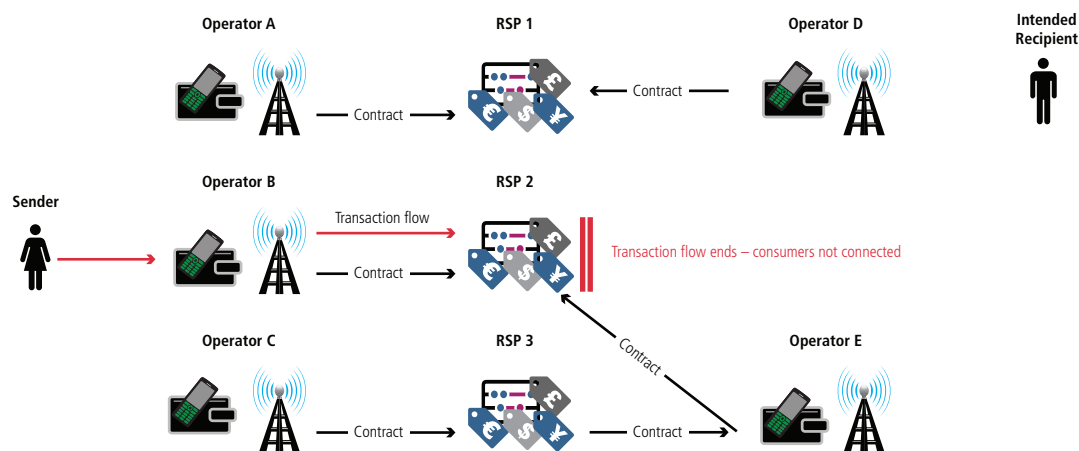
The methods of driving revenue from a remittance are a transaction fee and a foreign exchange margin or spread, and are explored in detail earlier in this paper. In addition, over the Operator channel there is potential to charge a fee for the voice or data traffic across the network, although this may add an additional barrier to consumer adoption.

It is important for the Operator to understand the revenue share model proposed by the RSP, and apply the market forces acting in the Operator's market. Specifically, the flexibility to adjust the pricing model for consumers across the transaction fee and foreign exchange spread will allow Operators to compete with the alternative models in the market.

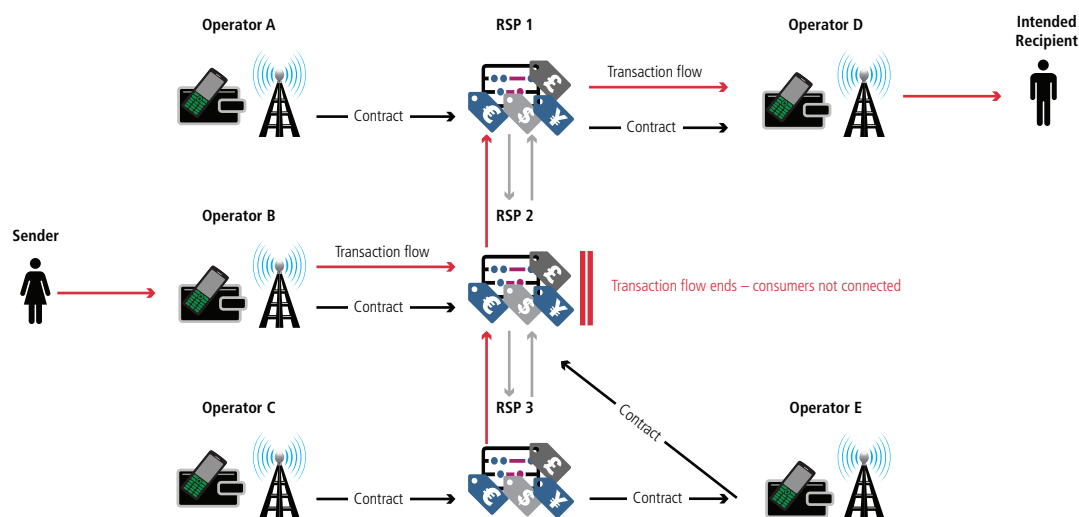
5 A note on Interoperability

As more international remittance hubs appear in the market, the need for an interoperable solution also increases. This requirement stems from the nature of international remittances. Existing money transfer options allow consumers to send money to any consumer, anywhere in the world. For mobile remittances to be adopted and successful, it is essential that a similar network is created.

To create the ability for consumers to send money to any other consumer in the world, RSPs must be capable and willing to initiate a transaction to be terminated by a different RSP and vice versa. There exists two challenges to be overcome to achieve this; the first technical and the second commercial.



The technical challenge, illustrated in the two diagrams, is relatively straightforward. RSPs must agree a standard for inter-hub messaging and integrate their solutions in line with agreed technical standards.



The commercial challenge to implement interoperability is more significant. RSPs must agree commercial initiation and termination rates, while maintaining the industry goal of reducing remittances below 6%.

Further, consumers should not have a significantly different experience to send a remittance across multiple RSP solutions. For example, the delivery of funds should remain instantaneous.

As the industry matures interoperability will continue to increase in importance and Operators will need to ensure that selected RSPs are a part of, or willing to be a part of, the industry drive to achieve interoperability.



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