Timor-Leste Summary

Population: 1.2 m (2014)
Wireless Teledensity: 60% (2012). MNOs suggest 96% coverage.
Percent Under Poverty Line: 41% (2009)
Adult Literacy: 58.3% (2010)
Ease of Doing Business: 172 (out of 183)
Main Banks: Caixa Geral de Depositos (CDG), Bank Mandiri, Banco Nacional Comercio de Timor-Leste (BNCTL), ANZ
Number of Branches: 26-27 plus 7 BNCTL ‘Mobile Branches’ (Set to increase to 30-31 by end 2014)
Mobile Network Operators: Timor Telecom, Telkomcel, Telemor

Overview of Mobile Banking in Timor-Leste

In 2012, the Central Bank (BCTL) prepared draft guidelines on Branchless Banking which clarified the position of the Central Bank on the integration of new technologies and delivery in the provisioning of financial services in Timor-Leste. These guidelines confirmed all branchless banking services would be led by BCTL-authorized financial institutions leaving no doubt that Timor-Leste would follow a bank-led model regarding the issuance and oversight of e-money. The guidelines allowed for partnerships and joint ventures between an authorized financial institution and non-bank institutions such as a telco or agent aggregator for example. The ultimate aim of BCTL is to follow a model of interoperability whereby all transactions will be centrally processed.

One bank, Caixa Geral de Depositos (aka CDG) has built a USSD-based mobile money wallet platform connected to a proprietary interbank switching system and has agreed commercial terms for distribution of services through Timor Telecom. Despite the issuance of these draft guidelines, the issue of accurate SIM registration for the use of mobile-facilitated banking has not been resolved therefore, branchless banking services have not yet been realized. CDG has requested from the Central Bank a ‘no objection’ to initiating a pilot of their mobile money services and awaits a response.

Mobile Money Readiness

<table>
<thead>
<tr>
<th>Source</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>4</td>
</tr>
<tr>
<td>Financial Sector</td>
<td>2</td>
</tr>
<tr>
<td>Telecom Sector</td>
<td>2</td>
</tr>
<tr>
<td>Distribution Channel</td>
<td>3</td>
</tr>
<tr>
<td>Market Demand</td>
<td>2</td>
</tr>
</tbody>
</table>

1 = High Readiness. 5 = Low Readiness

• Macro-economic Overview
  • Regulations
  • Financial Sector
  • Telecom Sector
  • Mobile Financial Services Landscape
## Macro-Economic Overview

### Key Country Statistics

- Population: 1.2 Million
- Age distribution:
  - 0-14 years: 42.4%
  - 15-24 years: 19.8%
  - 25-54 years: 29.3%
  - 55-64 years: 3.7%
  - 65 years and over: 3.6%
- Urban/rural split:
  - Urban: 23.8%
  - Rural: 76.2%
- GDP (PPP): Non-oil GDP: $1.29bln
- GDP per capita (PPP): $821
- Remittance (% of GDP): 11.4% (est.)
- Population without deposit account: 57.2%
- Population without FS access: 300,000
- Mobile phone penetration: 60% (est.)
- Mobile phone population coverage: 94% (est.)
- 25% of the population farms coffee
- 80% of the population relies on subsistence farming

### Insights

- The market is small and the ability to achieve scale is limited due to the young and overall small population.
- Banking penetration is low due to low urbanization, high transport costs and limited rural banking services. The introduction of two new MNOs has increased the reach of mobile and potential to efficiently deliver financial services via branchless banking.
- G2P payments such as social transfers and civil servant salaries could be disbursed digitally when agent networks and branchless banking services are established to reduce costs to the government and recipients.
- Three of four commercial banks are actively considering efforts to penetrate rural, underserved communities with financial services. Each of these banks has a natural market they could target to grow transaction volumes.
- MFIs are unable to create e-value, however, are able to actively participate in the ecosystem and could play an active role in agent rebalancing. This would help mitigate high cash handling costs which have limited the reach of banking services to date.

---

• Macro-economic Overview

• Regulations

• Financial Sector

• Telecom Sector

• Mobile Financial Services Landscape
Regulatory Overview

• Banco Central de Timor-Leste (BCTL), the Central Bank of Timor-Leste, oversees all monetary policies* and regulation of the financial sector.
• The Bank was formally established on 13 September 2011. This action transformed it from the Banking and Payments Authority.
• The BCTL has not formally enacted Mobile Financial Services or Branchless Banking guidelines. Draft Branchless Banking guidelines have circulated for comment which clearly specify the approach to digital financial services will be driven by authorized financial institutions. These Financial Institutions may develop partnerships or joint ventures with non-bank entities such as MNOs and agent / payment aggregators.
• The BCTL has issued separate guidelines for Licensing Money Transfer Organizations which specify that MTOs are prohibited from offering any financial services other than remittances.
• On 16 January 2014, the BCTL issued a high-level strategy paper outlining a vision for the development of a National Payments System to help the economy transition to a non-cash economy and support an extension of banking services to un/underserved populations. An ATS (combination RTGS & ACH) has been tendered and is in process of being implemented.
• BCTL’s aim for branchless banking is to achieve interoperability between service providers. The National Payment System (an RTGS and ACH) is a first step toward achieving that aim.

*Note. The official currency of Timor-Leste is the US dollar.
**Central Bank (BCTL)**
- Sets regulates the financial sector and oversees monetary policy*. Regulates banks and non-bank financial institutions like ODTIs (Other Deposit Taking Institutions) and oversees the development of the national payment systems.

**Autoridade Nacional de Comunicações (ANC)**
- Telecommunications regulator who oversees the sector; licensing, infrastructure, competition, disputes, access, spectrum management and etc.

**Roles & Responsibilities**

**Implications**
- The Central Bank endeavours to facilitate greater efficiencies in the financial sector through the development of a National Payment Systems Act to oversee an integrated national payment system.
- The Central Bank has confirmed its position that mobile financial services and branchless banking services will be driven by authorized financial institutions. Partnerships with MNOs and agency service providers are authorized.
- SIM registration isn’t required in Timor-Leste. SIM ownership information is either unknown or inaccurate which challenges common KYC practices and has delayed the approval of mobile-facilitated branchless banking.
- Financial institutions await regulations to clarify KYC requirements for branchless and mobile banking accounts.
- Agent Guidelines are currently being drafted and are expected to clarify the role and restriction of agents in branchless banking.

*Note. The official currency is Timor-Leste is the US dollar. Source: Organic Law of the Central Bank of Timor-Leste, Telecommunications Decree Law 15/2012*
## Regulatory Framework & Requirements

### Current Regulations

<table>
<thead>
<tr>
<th>Mobile Money Issuers</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal guidelines on mobile financial services have been enacted. Branchless Banking Guidelines have been drafted but are not yet approved.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deposit Taking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Law of the Central Bank of Timor-Leste</td>
</tr>
<tr>
<td>Public Instruction No 6/2010: Licensing &amp; Supervision of ODTIs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Branchless Banking Guidelines outline agent restrictions prohibiting agents from:</td>
</tr>
<tr>
<td>▪ Marketing or selling other financial products of the financial institution</td>
</tr>
<tr>
<td>▪ Changing the fee structure or pricing of the services</td>
</tr>
<tr>
<td>▪ Performing agency services without SLAs</td>
</tr>
<tr>
<td>(Agent Guidelines are being drafted)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Instruction 02/2004 on the prevention of Money Laundering, Customer Identification and Record Keeping</td>
</tr>
</tbody>
</table>

### Implications

| Banks are the only ‘authorized financial institutions’ that can issue e-money. |
| Authorized Other Deposit Taking Organizations (ODTIs) are able to pay, receive, collect and remit funds within Timor-Leste but not issue e-money. |
| The BCTL has stepped in to approve MTO agents. The expectation is that BCTL will seek to have certain oversight of the B/B agent network engaged by an e-money issuer. |
| The leading bank, CDG, has engaged the BCTL directly for clarity on their role and expectations with regards to MFS agents. |
| Banks are responsible for ensuring the mobile account is activated and that KYC protocols have been followed. |
| Agents are able to open B/B accounts on behalf of the service provider and must follow the same KYC protocols. |
## Regulatory Framework & Requirements

<table>
<thead>
<tr>
<th>Current Regulations</th>
<th>Implications</th>
</tr>
</thead>
</table>
| **KYC/AML Requirements** | • Banks are prohibited from dealing with unknown customers. (Because SIMs aren’t registered, the bank that has developed a mobile money solution hasn’t been able to assure the BCTL of their ability to comply with KYC requirements and therefore hasn’t received approval or ‘no objection’ to launch services.)
| • Public Instruction 02/2004 on the prevention of Money Laundering, Customer Identification and Record Keeping | • Only authorized financial institutions are licensed to issue e-money.
| **Licensing requirements** | • Non-financial institutions are eligible to participate in the ecosystem of and MFS scheme but will not receive independent licenses. |
| • UNTAET-Regulation 2000/8 on Bank Licensing & Supervision outlines requirements to be an authorized financial institution from a governance and capital investment perspective |
| • Draft Branchless Banking guidelines | • The BCTL may issue fines if banks are in violation of KYC requirements. |
Additional Regulatory Considerations

**Current Regulations**

- **Customer Protection**
  - Public Instruction 02/2004 on the prevention of Money Laundering, Customer Identification and Record Keeping
  - Draft Branchless Banking Guidelines

- **Data Privacy**
  - Public Instruction 02/2004 on the prevention of Money Laundering, Customer Identification and Record Keeping

- **Interoperability**
  - Draft Branchless Banking Guidelines
  - Financial Sector Development Master Plan
  - Strategy for National Payment Systems *(Proposal)*

- **International Remittances**
  - Guidelines for Licensing Money Transfer Operators.

**Implications**

- Banks are responsible for protecting customer privacy, adhering to KYC practices and overseeing data exchange.
- Banks must invest in systems that accommodate BCTL requirements and retain transaction records for five years.
- Agents are expected to abide by the same customer protection and data privacy terms as the service providers.
- The ambition of the government is to develop interoperability led by integrated electronic interbank clearing and settlement that can centrally process transactions. An ATS system is in implementation.
- There is no interchange between banks at present.
- No reference to MTOs using mobile financial services for remittances transactions.
- Anecdotally, the government has approved 9 MTO agents for international & domestic remittances. These agents are to be licensed and involved in the agent network.
• Macro-economic Overview
• Regulations
• Financial Sector
• Telecom Sector
• Mobile Financial Services Landscape
In November 2013, BCTL released a consultative paper on the Financial Sector Development Master Plan. It is a comprehensive and visionary plan to help Timor-Leste transition into a modern, efficient and inclusive financial services environment.

The financial sector is fragmented and underdeveloped in Timor-Leste. Each of the four licensed banks focus on distinct market segments for specialized services. Three of the four banks are considering opportunities to penetrate the rural, underserved population due to the growth of the mobile sector.

The Microfinance sector has deep reach in rural communities and is working to expand their product portfolio for new acquisition and to deepen client relationships.

The existing footprint of bank branches (as illustrated to the right) is insufficient to service rural communities without the use of mobility services (transport vehicles), agency banking or mobile services due to high cash handling costs; transport, security, and loss in productivity.

There is no interoperability or interchange in the market and very little penetration of digital services with less than 100 eftPOS terminals and few ATMs in the country.

Source: Banco Central de Timor-Leste official website.
Financial Sector Development Plan 2014 - 2025

In November 2013, BCTL released a Consultative Paper on the Financial Sector Development Master Plan for Timor-Leste through 2025. This paper outlines a vision and actions to required to develop the financial sector to be a ‘enabler of economic and social development’. Part of this vision is for cash to be replaced with widespread use of mobile payments and electronic wallets.

- **Active collaboration** in the banking sector will support a platform that promotes a wider use of electronic technologies.
  - Achieving greater scale of users and volumes of transactions to support commercial viability
  - Building and inter-connectivity in the system to enable institutions to operate as a system

- **Encourage Competition**
  - *Fostering competition between financial institutions* promotes creation of diverse & affordable products. Qualified FIs that can deliver financial services to the unbanked are invited to TL.

- **Increase Accessibility**
  - Greater *access to cash points* will encourage users into the electronic banking system until electronic payments are widely accepted.

- **Deliver Financial Literacy**
  - BCTL is seeking further evaluation of branchless banking to assess the costs and benefits to users and commercial viability to providers. (Reference countries are Solomon Islands & Vanuatu)
  - Focus on gaining consumer trust in institutions and new technologies. BCTL is considering instituting deposit guarantees in the medium term (by 2020) to build user confidence.

**Potential for mobile distribution in the future**

- **Financial Services Depth**
  - BCTL seeks to *expand credit and insurance facilities* to the mass market in the next few years

## Financial Sector Snapshot

<table>
<thead>
<tr>
<th>Regulated Financial Institutions</th>
<th>2013</th>
<th>Current</th>
<th>YE 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>State Owned Commercial Banks</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>State Owned Development Financial Institutions</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Commercial Banks</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Private Commercial Banks</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Branches (not incl mobile)</strong></td>
<td>25</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>State Owned Commercial Banks</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>State Owned Development Financial Institutions</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Commercial Banks</td>
<td>5</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Private Commercial Banks</td>
<td>11</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Mobile Bank Branches (BNCTL)</td>
<td>6</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td><strong>Accounts</strong></td>
<td>265,000</td>
<td>315,000 (est)</td>
<td></td>
</tr>
<tr>
<td>Agents</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ATMs</td>
<td>18</td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>POS</td>
<td>69</td>
<td>104</td>
<td>250</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>N/A</td>
<td>N/A</td>
<td>2,500 (est)</td>
</tr>
<tr>
<td>Debit Cards</td>
<td>7,500</td>
<td>10,000</td>
<td>50,000 (est)</td>
</tr>
</tbody>
</table>

### Banks Branches ATMS eftPOS terminals

<table>
<thead>
<tr>
<th>Bank</th>
<th>Branches</th>
<th>ATMS</th>
<th>eftPOS terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNCTL</td>
<td>13</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CDG</td>
<td>12</td>
<td>15</td>
<td>55 (145 in box)</td>
</tr>
<tr>
<td>Bank Mandiri</td>
<td>1</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>ANZ</td>
<td>1</td>
<td>6</td>
<td>49</td>
</tr>
</tbody>
</table>

### Microfinance Institutions

<table>
<thead>
<tr>
<th>Customer Size</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10,000 customers</td>
<td>1</td>
</tr>
<tr>
<td>10,000-100,000 customers</td>
<td>1</td>
</tr>
<tr>
<td>&gt;100,000 customers</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: Banco Central de Timor-Leste official website. Interviews and in-field market research.
*Note: High likelihood of one customer with multiple accounts. No accurate data about unique account holders.*
### Infrastructure & Payment Systems Snapshot

<table>
<thead>
<tr>
<th><strong>RTGS &amp; ACH (ATS)</strong></th>
<th><strong>National Payments System</strong></th>
<th><strong>Payment Switch</strong></th>
<th><strong>Credit Bureau</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>(early 2015 launch)</strong></td>
<td><strong>Loos 24 (CGD)</strong></td>
<td><strong>Credit Information Registry</strong></td>
</tr>
<tr>
<td></td>
<td>• National Payment Systems legislation is being drafted and expected to pass in late 2014.</td>
<td>• An interbank switch system implemented and operated by CDG that connects all CDG ATMs, POS machines, and Visa to CDG’s Core Banking System.</td>
<td>• There is a small credit registry in place available to the banks and microfinance institutions <em>(Operated by BCTL)</em></td>
</tr>
<tr>
<td></td>
<td>• The ATS clearinghouse and settlement system is in implementation with a target implementation date of 1Q15.</td>
<td>• Capable to be completely agnostic solution which could be made available to all providers as the front-end to the ATS platform.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All commercial authorized financial institutions, BCTL and the Treasury will connect to the ATS.</td>
<td>• Interested in building a consortium with the other banks and providers and to hand over to a 3rd party to run the service.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The BCTL is planning to initiate a project for the development of a nation-wide electronic network and switch at an undefined date.</td>
<td>• CDG is acquiring a domestic Visa issuing license and currently does cross-border Visa payments.</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** *Strategy for National Payment System Consultation - BCTL, January 2014, and Industry interviews and in-market research, March 2014.*
## Financial Inclusion Snapshot

<table>
<thead>
<tr>
<th></th>
<th>Commercial Banks</th>
<th>ODTIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Depositors</td>
<td>249,132</td>
<td>22,641</td>
</tr>
<tr>
<td>Amount of Deposits</td>
<td>$414,624,588</td>
<td>$2,284,797</td>
</tr>
<tr>
<td>Number of Borrowers</td>
<td>23,561</td>
<td>16,879</td>
</tr>
<tr>
<td>Amount of Loans</td>
<td>$155,797,094</td>
<td>$7,544,196</td>
</tr>
</tbody>
</table>

*Sources: Banco Central de Timor-Leste, Economics & Statistics Division*
# Bank Snapshot: 4 Licensed Banks

<table>
<thead>
<tr>
<th>Bank</th>
<th>Customers</th>
<th>Accounts</th>
<th>Branches</th>
<th>ATMs</th>
<th>POS</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANZ</td>
<td>14,000</td>
<td>(16,000)</td>
<td>1</td>
<td>6</td>
<td>49</td>
<td>ANZ’s strategic focus is the corporate &amp; infrastructure development space. Retail banking is not a focus for the Timor branch.</td>
</tr>
<tr>
<td>BNCTL</td>
<td>140,000</td>
<td>(147,000)</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>State-owned bank and former MFI. BNCTL disburses payrolls for 70% of TL’s civil servants which result in bank queues of multi-hour waiting times. Branch presence in all districts.</td>
</tr>
<tr>
<td>Caixa Geral de Depositos</td>
<td>101,000</td>
<td>(62,000)</td>
<td>12</td>
<td>15</td>
<td>55</td>
<td>CDG has a USSD mobile money solution ready to pilot and awaiting approval from BCTL. Expansion efforts are underway.</td>
</tr>
<tr>
<td>Mandiri Syariah</td>
<td>35,000</td>
<td>(46,000)</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>Bank Mandiri suggested an interest in branchless banking to support the electronic transfer of domestic remittances.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>USD $128 mln</th>
<th>USD $39 mln</th>
<th>USD $155 mln</th>
<th>USD $190 mln</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(assets held in Timor-Leste)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Industry interviews and in-market research, March 2014.  Financial Sector Development Master Plan. BCTL, November 2013*
# MFI Snapshot: 2 MFIs seeking Other Deposit Taking Institution (ODTI) status

<table>
<thead>
<tr>
<th>MFI</th>
<th>Borrowers</th>
<th>Branches</th>
<th>Staff</th>
<th>Field Staff</th>
<th>Loans</th>
<th>Deposits</th>
<th>Focus on SME and remittances products</th>
<th>Annual growth projection of 12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moris Rasik</td>
<td>8,042</td>
<td>13</td>
<td>121</td>
<td>56</td>
<td>$4.2 mln</td>
<td>$2.3 mln</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Servico Financas Ba Familia</td>
<td>6133</td>
<td>12</td>
<td>117</td>
<td>47</td>
<td>$3.7 mln</td>
<td>$1.2 mln</td>
<td>• Organizational changes are underway to meet BCTL’s requirements for ODTIs. (Other Deposit Taking Institutions)</td>
<td>• Annual growth target of 20%</td>
</tr>
</tbody>
</table>

Source: *Industry interviews and in-market research, March 2014. Data current as of December 2013*
• Macro-economic Overview
• Regulations
• Financial Sector

• **Telecom Sector**

• Mobile Financial Services Landscape
Mobile Industry Profile

<table>
<thead>
<tr>
<th>Operators</th>
<th>2011</th>
<th>Present (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Timor Telecom</td>
<td></td>
<td>• Timor Telecom</td>
</tr>
<tr>
<td>• Telemor</td>
<td></td>
<td>• Telkomcel</td>
</tr>
</tbody>
</table>

| Coverage             | 92.5%                 | 94% (Territory)           |
|                      | 162 2G sites /76 3G sites |

| SIM Penetration      | 54.9%                 | 61%                        |

| Unique subscribers   | 598,000               | 692,000                    |

Comments:
From mid-2003, Timor Telecom was the monopoly operator in Timor-Leste. In mid-2012, the GoTL issued two new operating licenses. This increase in competition has resulted in decreased prices, an increase in unique subscribers, diversified products and expanded coverage. Anecdotally, all operators agree the market has become a dual-SIM market. The new MNOs are seeking market niches:

• **Timor Telecom** is working to defend customer base.
• **Telemor**: Strong focus on the acquiring the low-end of the pre-paid market and rural segment.
• **Telekomcel**: Strong focus on the enterprise segment.

- Visibility into the current market and current dynamics are difficult to assess as the new entrants have been fully operational for only one year. Activities are aggressively focused on acquisitions and activations.
- Mobile broadband will become a more significant opportunity when all providers have their fibre backbones in place. This reach of reliable data services would increase the opportunity to leverage alternative financial delivery channels; ATMs, eftPOS and mobile.
- Although population coverage is expansive, navigating the topography with consistent and reliable signal can be challenging. In addition, rural areas experience power shortages which can prevent continuous service.

Market Share

- **Timor Telecom**: 89%
- **Telemor**: 11%
- **Telkomcel**: 0%

Source: GMSA Intelligence (4Q13), Industry Interviews
## Mobile Network Operators & Value Creation

<table>
<thead>
<tr>
<th>Mobile Network Operator</th>
<th>Ownership Details</th>
<th>Subscribers</th>
<th>ARPU</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timor Telecom</td>
<td>41.1% owned by Portugal Telecom</td>
<td>617,000 subs</td>
<td>$7.55 ARPU (approx)</td>
<td>Agreement in place to provide agent services for CDG’s Mobile Money services</td>
</tr>
<tr>
<td>Telkomcel</td>
<td>Owned by Telin (Indonesia)</td>
<td>71,750 subs</td>
<td>N/A</td>
<td>No known MFS project underway, EDTL (electricity company) is selling prepaid vouchers via Telkomcel’s agent network.</td>
</tr>
<tr>
<td>Viettel (Vietnam)</td>
<td>Owned by Viettel (Vietnam)</td>
<td>10,000 subs</td>
<td>N/A</td>
<td>No known MFS project underway</td>
</tr>
</tbody>
</table>

### Current State of the Industry

The new entrants are focused on expansion into new markets however, growth will slow and the players will be looking for a loyalty proposition for users in the core voice space and differentiation in the product portfolio. Partnerships with a mobile money solution provider could help drive loyalty. In addition, all three MNOs are actively laying fibre networks to provide reliable and redundant data connectivity.

### Mobile Financial Services Opportunity

The Central Bank prohibits MNOs from offering mobile financial services. All parties indicated an interest to support these services with their infrastructure and distribution channels. Timor Telecom and CDG have already established a commercial relationship for branchless banking infrastructure and agency services outside of Dili. Telkomcel indicated an interest in offering remittances in a partnership with BNCTL.

*Source: GMSA Intelligence (4Q13)*
- Macro-economic Overview
- Regulations
- Financial Sector
- Telecom Sector

- Mobile Financial Services Landscape
Mobile Financial Services Overview

- In 2012, the BCTL confirmed that mobile financial services must aim to be an interoperable system. E-money issuance is allowed only by the banks.
- The Financial Sector Development Master Plan, issued for comment in November 2013, confirmed that the BCTL is seeking collaboration from the banks to build a competitive retail banking environment.
- Within the draft Branchless Banking guidelines regulations, banks are able to use branchless services for:
  - Cash in / Cash out
  - Account to Account payments (wallet to current account, credit cards, savings)
  - Domestic remittances
  - Merchant Payments
  - Bill Payments
  - Government payments
  - Loan disbursement and repayments
- Formal Branchless Banking guidelines have been drafted but are yet to be released.
  - The guidelines specify that ODTIs will be able to participate in the all services but the issuance of e-money.
- Formal Agent guidelines are in process of being drafted.
- The Financial Sector Development Master Plan indicates a Payments System Strategy is underway.
MFS Initiatives

• CDG has developed a closed USSD-based mobile money wallet solution which interfaces with their core banking system through a payment switch.
• CDG has a commercial agreement in place with Timor Telecom to leverage the physical store presence as agents for the mobile money service.
• CDG has purchased a dedicated USSD gateway (located at Timor Telecom) to support their mobile money/branchless banking business.
• CDG is requesting ‘No Objection’ BCTL to launch a pilot with CDG banking customers.
• CDG is awaiting the ‘No Objection’ Letter from BCTL and further direction on how to manage KYC in the context of unregistered or inaccurately assigned SIMs.

• Bank Mandiri has indicated interest in developing domestic and international remittance services through an electronic, proprietary service.
• Bank Mandiri, under the jurisdiction of the Bank of Indonesia, is awaiting approval to commence development of a service that will be piloted in Timor-Leste with the aim to roll out in Indonesia.
• To-date, no formal activity in the MFS space is visible.

Source: Interview with COO, Caixa Geral de Depitos (CDG) and Bank Mandiri.
Distribution Channel Overview

- Timor-Leste is characterized by very poor transportation infrastructure and poor quality roads.

- There are 27 bank branches in Timor Leste. CDG and BNCTL have branches in all provinces. There are approximately 25 MNO retail shops across the country with a concentration in Dili.

- Limited large-scale distribution partners exist:
  - Two MNO distribution vendors
  - One Coca-Cola distributor

- Interviewees could not think of any companies that transport goods and money back and forth from Dili to rural areas on a regular basis. This movement occurs on a personal basis via flights to and from Dili.

- BNCTL, the licensed commercial bank and former MFI, has a presence in all districts and 6 secured vans providing ‘mobile banking services’. With their presence and mobility, BNCTL may be able to provide agency or liquidity management as a value chain member in the ecosystem. (BNCTL operates much like an MFI and will unlikely provide branchless banking and MFS services in the medium term.)

- Timor Telecom and CGD have agreed commercial terms for Timor Telecom shops to serve as agent locations when the mobile banking pilot launches.

- Nine registered MTOs have been approved by BCTL however these entities specialises in international inbound (from Europe) or outbound (to China) services and will likely not be part of a domestic remittance scheme nor provide agency services.

- Limited potential partners suggest that agent networks will require more direct oversight and management.
• Macro-economic Overview
• Regulations
• Financial Sector
• Telecom Sector
• Mobile Financial Services Landscape
• Macro-economic Overview
• Regulations
• Financial Sector
• Telecom Sector
• Mobile Financial Services Landscape
## Critical Focus Areas for Branchless & Mobile Banking Success

<table>
<thead>
<tr>
<th>Focus</th>
<th>Description &amp; Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Acceptance of branchless and mobile financial services amongst targeted unbanked populations is often hampered by low financial literacy, low consumer awareness, low trust in the financial institution or digital services and a weak or irrelevant value proposition.</td>
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<tr>
<td>Adoption</td>
<td>Converting registrations to active users requires a balance of consumer demand and service supply. High dormancy rates can be a result of a lack of understanding or trust in the products or services or an underdeveloped agent / merchant ecosystem or aggressive acquisition incentives.</td>
</tr>
</tbody>
</table>
| Accessibility | To gain trust in digital financial services, consumers must have ready access to their money.  
• **Accessibility:**  
  • Physical points of presence that are convenient for consumers (ATMs, eftPOS, agents).  
  • Adequate agent coverage, yet not too concentrated as to limit agent revenue streams.  
• **Availability of Services:**  
  • Sufficient liquidity to convert between digital & physical money.  
  • Digital-enabled services must offer reliable coverage of a mobile network. |
| Usage       | Encouraging regular usage requires engaging products and transaction convenience. Usage drivers depend on consumer needs and market dynamics. Solutions can range from modified financial products for the underserved or special efforts to ensure liquidity while building an ecosystem. |
| Expansion   | Deepening relationships from transaction-based services to financial products and services helps to build loyalty and increase user revenues. Access to bundled products such as interest-bearing savings with micro-insurance or credit can keep customers engaged. |
### Source Index

#### Documents

**Banking Regulation:**
- Organic Law of the Central Bank of Timor-Leste
- Public Instruction 02/2004 on the prevention of Money Laundering, Customer Identification and Record Keeping
- Public Instruction No 6/2010 : Licensing & Supervision of ODTIs

**Industry Reports:**
- BCTL - Strategy National Payment Systems Consultation, January 2014
- ADB - Enabling Branchless Banking in Timor-Leste, March 2010
- ADB - Assessment of the Potential for G2P, Cash Management, Field Agents and Mobile Banking Payment Service Provision, March 2013
- BCTL-Financial Sector Development Master Plan, Nov 2013

**Reference Sites:**
- CIA World Fact Book
- World Bank - World Development Indicators
- Doing Business 2014 - World Bank

#### Interviews

**Commercial Banks:**
- BNCTL
- CDG (CDG)
- ANZ
- Bank Mandiri

**Micro Finance Institutions:**
- Moris Rasik
- TRM

**MNOs:**
- Timor Telecom
- Telkomcel
- Telemor

**Other:**
- UNCDF / INFUSE
- EDTL
- IFC Staff Interviews (Milissa Day, Leila Martins, Tiago Guerra)