IFC Mobile Money Scoping
Country Report: Tunisia

Janine Firpo, Cherine El Sayed, and Philippe Breul

May 27th - June 2nd, 2011
**Tunisia Summary - page 1**

<table>
<thead>
<tr>
<th>Overall Readiness Ranking</th>
<th>1 (poor)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Mobile Money Solution</strong></td>
<td>No transformational services, due to regulatory constraints</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>10.6 million (small)</td>
</tr>
<tr>
<td><strong>Mobile Penetration</strong></td>
<td>More than 100% (extremely high)</td>
</tr>
<tr>
<td><strong>Banked Population</strong></td>
<td>35-50% of economically active adults (moderate)</td>
</tr>
<tr>
<td><strong>Remittance % of GDP</strong></td>
<td>5% of GDP, $1.97 billion in 2009</td>
</tr>
<tr>
<td><strong>Percent under poverty line</strong></td>
<td>7.6% (Mix Market, 2010)</td>
</tr>
<tr>
<td><strong>Economically Active population</strong></td>
<td>36% (Low)</td>
</tr>
<tr>
<td><strong>Adult Literacy</strong></td>
<td>74.3% (High)</td>
</tr>
<tr>
<td><strong>Mobile Network Operators</strong></td>
<td>Tunisiana (52%)</td>
</tr>
<tr>
<td></td>
<td>Tunisia Telecom (45%)</td>
</tr>
<tr>
<td></td>
<td>Orange (3%)</td>
</tr>
</tbody>
</table>

*All MNOs are at least partially owned by the government*

**Additional comments**

In January 2011, Tunisia had a political revolution that toppled the government. The country is still adjusting to the changes, and while there is hope, there is also significant uncertainty. A mobile money solution had been ready to launch in early 2010, but it was stopped by the Central Bank. It is believed that two primarily state-owned companies were behind the decision, as they saw the private sector initiative as competitive. Although all big banks have an additive mobile banking solution, there is little appetite for mobile money until the regulations change. All participants in the market asked for support in working with the Central Bank.
• Macro-economic Overview
  • Regulations
  • Financial Sector
  • Telecom Sector
  • Distribution Channel
  • Mobile Financial Services Landscape
Key Country Statistics

- Population: 10.6 million
- Age distribution: 23.2% (0-14 years), 69.3% (15-64 years), 7.5% (65 years and over)
- Urban/rural split: 67% urban
- GDP (PPP): $100.3 billion, 70th globally
- GDP per capita (PPP): $9,400, 114th globally
- Population below poverty line: 7.6% (Mix Market, 2010)
- Economically active: 3.83 million, 14% unemployed
- Literacy rate: 74.3%
- Banking penetration: 35% - 50% of economically active (est)
- Mobile phone penetration: >95%
- Remittance (% of GDP): 5%

Insights

- Several players are prepared to enter the market, but are not proceeding due to the extremely stringent regulations.
- As a result of a political revolution in early 2011, appetite for change is high but too early to determine how this will impact mobile money, particularly in terms of regulations.
- Opportunities for mobile money may be limited, even if regulatory restrictions are removed.
  - There is a relatively high GDP per capita
  - Significant amount of the populations is banked
  - Remittances are a relatively small % of GDP
  - Post Office appears to handle domestic money transfer fairly efficiently, volumes are not that high
  - Leading MFI believes their potential customer base is only 1 million individuals
- Understanding customer requirements and financial needs should be a critical pre-determinant of any mobile money investment
- Developing financial models to assess the best case scenarios in the market are also recommended

Source: CIA Factbook 2010
• Macro-economic Overview

• Regulations

• Financial Sector
• Telecom Sector
• Distribution Channel
• Mobile Financial Services Landscape
• IFC Opportunities
• Potential Risks
• Next Steps
• Appendix: Interviews Conducted
Regulatory Bodies Involved in Mobile Banking

### Banque Centrale de Tunisie (BCT)
- Defines prudential regulation, exerts control on banks and financial establishments
- Supervises lending institutions, grants licenses for foreign currency operations
- Banker to the government and Tunisia’s banks
- Considered the primary regulator for mobile money and e-payments
- Partnered with the Societe Monetique Tunisie (SMT) to provide switching and clearing

### Ministry of Communication Technologies (MCT)
- Organizes the telecom sector, oversees planning, control, and supervision of activities
- Finances activities of the Tunisian Post Office, the Office National de Télédiffusion, and other ICT related activities

### Societe Monetique Tunisie (SMT)
- Develops technology related to payments
- Manages switching and clearing on behalf of BCT
- Partners with BCT, present at meetings

### Implications
- Clear lines of regulatory authority in country
- In Jan 2011, just before the revolution, BCT released new regulations that limits ability of both banks and non-banks to deliver services
- A steering committee to address mobile money issues was organized by the MCT, but BCT has not been involved.
- Conversations with BCT and SMT, which started with a great deal of resistance, became more accommodating over time.
- A new Governor, formerly from the World Bank, joined the BCT after the revolution
- Changes since the revolution provide hope that things could change in regulatory framework, including alterations to laws
- SMT should be considered in regulatory mix as it appears to have a lot of sway with BCT
- Instance Nacional Technology is MNO regulator, but does not appear to have role
BCT issued a circular on mobile payments services in Jan 2011
- Mobile phones can be used for payment, but they can only be loaded through a bank account or a pre-paid card issued by a bank
- BCT must be notified of all payment service features, and of any changes to the service
- BCT is responsible for monitoring and controlling operations
- By law, the only entities that can accept deposits are banks and the Post Office

Before circular, conversation within BCT about whether system should be available only to the banked or to all people in the country
- BCT has a bias towards banks because it sees its role as protecting them, if MNOs participate could be disruptive to banks
- Use of pre-paid cards for the unbanked sector protects SMT's card-based settlement role
- Two laws would need to be changed to enable MNOs to accept deposits

The current regulations severely limit the ability of mobile banking services to expand
- According to one MNO “discussions about agents have not even started”

Value of the services offered to customers is unclear, particularly for the unbanked
- Appears great flexibility is possible in regards to the amounts moved through these systems, but believe there are other laws which have already set limits

Mobile Phone Money Issuers
- Only bank branches, Post Office branches, and branded MNO storefronts can serve
- Cash-in and customer acquisition only allowed at bank and PO branches, due to “deposit” definition

Agents
- Funds in the mobile wallet can be used for payments
- Banks will set limits of each payment and maximum number of transactions in period

Services
- Values in the mobile wallet can be used for payments
- Banks will set limits of each payment and maximum number of transactions in period

Implications
- Only bank branches, Post Office branches, and branded MNO storefronts can serve
- Cash-in and customer acquisition only allowed at bank and PO branches, due to “deposit” definition
<table>
<thead>
<tr>
<th>Interoperability</th>
<th>Current Regulations</th>
<th>Implications</th>
</tr>
</thead>
</table>
|                  | ▪ Banks can hire a payment service provider to develop the solution, but the ultimate responsibility lies with the bank  
▪ Annex to circular says that “availability of mechanisms that allow finalization of payments with whatever bank, payment service provider or mobile phone operator” | ▪ This could be interpreted to mean that interoperability is required through the payments system from the time the service is introduced  
▪ Even with circular, there is lack of clarity on a number of different issues - this being one |
| KYC/AML          | ▪ Requires special form, photocopy of ID card, and phone numbers  
▪ Can only be performed at a bank branch  
▪ Regulations not clear whether KYC can be outsourced | ▪ Information regarding KYC was not obtained from regulators, obtained during interview with MFSP - so need to validate during full diagnostic |
| Customer Protection | ▪ Other than mentioning pins, there are no explicit comments about customers  
▪ To open a bank account need salary and a range of documents (heresay) | ▪ Further suggests incompleteness and lack of clarity regarding existing regulations  
▪ Requires full diagnostic to understand all implications |
- Macro-economic Overview
- Regulations
- Financial Sector
- Telecom Sector
- Distribution Channel
- Mobile Financial Services Landscape
# Financial System Overview

<table>
<thead>
<tr>
<th>Banks</th>
<th>Microfinance Institutions</th>
<th>Payment Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunisia has 43 financial institutions - 20 universal banks, 8 international banks, 11 leasing, and 2 factory companies</td>
<td>• ENDA is the only MFI in Tunisia with over 170,000 active clients</td>
<td>• Tunisia has approximately 1,660 ATMs and 12,000 POS terminals</td>
</tr>
<tr>
<td>Of the 43 banks, 3 are public and the remainder are private</td>
<td>• It is also the only institution that adheres to MFI best practice</td>
<td>• Two entities described as playing role in clearing and settlement:</td>
</tr>
<tr>
<td>The 10 largest banks hold 80% of the capital, with the 3 state banks alone holding 51%</td>
<td>• The sector has more than 280 other NGOs providing loans, their client numbers are unknown</td>
<td>✓ SMT - card clearing</td>
</tr>
<tr>
<td>Combined the banks provide only 1,400 branches</td>
<td>• The sector can only provide loans to their clients, loan size is restricted at TD 5,000 ($3,625)</td>
<td>✓ SIBTEL - check clearing</td>
</tr>
<tr>
<td>Questions within banks about the value of mobile wallets and role of MNOs</td>
<td>• Other 280+ micro-credit institutions have small clients bases, no credible customer nos</td>
<td>• Less than 20% of payments in the country are made by cards, may be due to lack of trust</td>
</tr>
<tr>
<td></td>
<td>• Inc foreign governments and international organizations (e.g. African Development Bank)</td>
<td>• Although MFS have been in market for years, uptake limited as it is an additive model</td>
</tr>
</tbody>
</table>

**Societe Monetique Tunisie**

- Created by banks to centralize all card traffic, linked to banks, MNOs, and international payments gateway
- SMT believes that all payments processing should go through banks, want all bank account holders to have cards
- Market participants believe that SMT played a key role in drafting January 2011 mobile payments circular

Source: www.mfw4a.org/tunisia/tunisia-financial-sector-profile.html
## Banking Sector

<table>
<thead>
<tr>
<th>Bank</th>
<th>Customers</th>
<th>Branches</th>
<th>ATMs</th>
<th>POS Terminals</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attijari Bank (private)</td>
<td>25,000 professional clients</td>
<td>170 branches</td>
<td>187 ATMs</td>
<td>800 POS terminals</td>
<td>Tritux has developed the bank’s mobile banking platform. Offers debit cards only, no credit cards</td>
</tr>
<tr>
<td>Banque Nationale Agricole (public)</td>
<td>n/a customers</td>
<td>160 branches</td>
<td>135 ATMs</td>
<td>n/a POS terminals</td>
<td>With Tunisiana, offering mobile top-up from bank account debit.</td>
</tr>
<tr>
<td>Banque International Arabe de Tunisie (private)</td>
<td>n/a customers</td>
<td>135 branches</td>
<td>156 ATMs</td>
<td>n/a POS terminals</td>
<td>Had offered M-Dinar with Tunisiana and ENDA, inc transfers, top ups, and loan payments.</td>
</tr>
<tr>
<td>Societe Tunisienne de Banque (public)</td>
<td>n/a customers</td>
<td>122 branches</td>
<td>183 ATMs</td>
<td>n/a POS terminals</td>
<td>Launched SMS banking in 2004 with Tunisiana, 44,000 subscribers in first 6 months.</td>
</tr>
<tr>
<td>Banque de L’Habitat (public/private)</td>
<td>700,000 customers</td>
<td>85 branches</td>
<td>100 ATMs</td>
<td>100s+ POS terminals</td>
<td>3rd or 4th largest bank in Tunisia. Have had mobile banking product for their customers for 5-6 years</td>
</tr>
<tr>
<td>Amen Bank (private)</td>
<td>220,000 customers</td>
<td>126 branches</td>
<td>130 ATMs</td>
<td>1,250 POS terminals</td>
<td>With Dinar Express, Amen Bank customers can transfer funds to non-customers who can withdraw from ATMs</td>
</tr>
</tbody>
</table>
Microfinance Sector

Total pool of 700,000 to 1 million potential customers
The market is highly fragmented, with over 280 microfinance institutions
ENDA, only large MFI, serves 170,000 customers

- ENDA has 63 branches around Tunisia and 170,000 active microfinance clients. Due to regulatory constraints, they have no ATMs, POS terminals, or card services for their customers.
- Had been working with Creova, BIAT, and the BCT to develop a mobile money solution. However, due to regulatory constraints, the project is on hold.
- Would like to use mobile money to reduce the costs of loan repayment, sees as value added service for their customers.
Other Important Financial Institutions

Societe Monetique Tunisie (SMT)
- Payment solution provider to banks in Tunisia, which are responsible for marketing solutions to their customers
- Created by Tunisian banks in 1989 to centralize all card business, all banks in the country are connected to SMT’s platform, which also connects to VISA, MasterCard, and other international card systems
- Owned by 14 banks, Tunisia’s 3 public banks own majority and 11 private banks own remainder.
- Banque Centrale de Tunisie is not an owner of the SMT, but the two organizations have a very close relationship
- Working with MNOs, such as Tunisie Telecom, to link mobile phones with credit cards, enabling customers to use make purchases from participating merchants with their phones
- In discussions with banks to provide a single gateway for bill payments

Le Poste Tunisienne
- Provides financial services, including savings and current accounts, through a network of 1,030 branches, 600 of which are connected. Government payments also flow through the Post Office.
- As much as 85% of international remittances is handled by the Post Office, which is described as “fairly efficient”
- Through partnership with Tunisia Telecom, have been offering a mobile utility payments solution for over a year
- 700,000 pre-paid “eDinar” cards in the market, primarily being used by students. Some consider product a failure because the students have to use the cards to pay their school fees

Association of Professional Bankers (APB)
- Most of the country’s banks belong
- Started a steering committee to discuss e-banking issues. Due to other priorities, not much has happened. However, considered a strong group that could be reinvigorated.
- Most of Tunisia’s banks belong to the APB, post-revolution there is a new General Manager, Muldi Wahesi.
Payment Service Providers

Tritux

- Tech company that specializes in developing applications for telecom and banking sectors
- MobiBank - in-house solution for mobile banking that provides SM< USSD, IVR, and web channels, currently used by Attijari Bank. Solution requires customers to be banked. Funds transferred to non-banked person can be withdrawn from ATM or POS. Bank gets all revenue
- SOS-Credit - lets MNOs provide loans to pre-paid clients, implemented by Tunisia Telecom
- Started business in 2007, has $110,000 in working capital and 34 employees. Does not understand why MNOs should participate or receive any revenue

ViaMobile

- Tech company focused on mobile financial services. Subsidiary of Creova, an MFSP based in France with projects in Lebanon and Sierra Leone.
- M-Dinar - had planned to launch as a mobile money solution with BIAT, ENDA, and Tunisiana in Q1 2010, but were stopped by the BCT, which had previously provided verbal agreement.
- Views SMT as biggest obstacle in the market. Claims SMT and Tunisia Telecom were entities that asked the BCT to stop 2010 launch, because they wanted to launch first in July 2010.
- Still moving forward with M-Dinar with ENDA, but on a smaller scale to test. Will offer money transfer and loan repayments, but require BCT approval first. Looking for innovative ways to work within current constraints, such as using Internet for cash-in.
Financial Flows

International Remittances

- In 2005, the Ministry of Foreign Affairs estimated that Tunisian migration involved 934,000 people. This figure was supported verbally by interviewees, who set the number at 1 million.
- France is the most popular destination with over 50% of migrants in 2005. Other key destinations are Italy, Germany, and Libya.
- In 2009, Tunisia received $1.97 billion in international remittances, which equates to 4.9% of GDP.

Other Flows through Cards

- Service industry is the largest employer in the country, companies use salary cards as payment. Employees withdraw funds from ATMs and POS terminals.
- Similar opportunity with government payments, such as salaries, pensions, and scholarships.

Sources:
• Macro-economic Overview
• Regulations
• Financial Sector
  • **Telecom Sector**
• Distribution Channel
• Mobile Financial Services Landscape
## Mobile Network Operators

Penetration of more than 100%, if all SIMs counted, > 70% penetration among unique users
All telecom operators owned, in part, by government
All telecom operators have introduced products possible within regulatory limits

<table>
<thead>
<tr>
<th>Operator</th>
<th>Customers</th>
<th>Market Share</th>
<th>Ownership</th>
<th>Products and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunisiana</td>
<td>5.7 million</td>
<td>52%</td>
<td>Tunisia Government (25%)</td>
<td>• SMS banking solution with SMT (2004) &lt;br&gt; • Enable banks to top-up mobiles through bank accounts &lt;br&gt; • Involved with ViaMobile, BIAT, &amp; ENDA, in M-Dinar, but stopped after revolution</td>
</tr>
<tr>
<td>Tunisiana</td>
<td>6.0 million (fixed and mobile lines)</td>
<td>45%</td>
<td>Tunisia Government (65%)</td>
<td>• TTCash - mobile airtime transfer (2006) &lt;br&gt; • Airtime top-up from banks (2008) &lt;br&gt; • Mobi-Dinar - airtime top-up from Post Office eDinar card (2010) TTCASH &lt;br&gt; • Airtime top-up from France to Tunisia</td>
</tr>
<tr>
<td>Orange</td>
<td>1.0 million</td>
<td>3%</td>
<td>Tunisia Government (51%)</td>
<td>• New MNO, business started May 2010 &lt;br&gt; • Working with SMT on basic services: top-up, bill payment, ATM cash out &lt;br&gt; • Have a mobile money strategy, but cannot deploy under current regs</td>
</tr>
</tbody>
</table>

Penetration of more than 100%, if all SIMs counted, > 70% penetration among unique users
All telecom operators owned, in part, by government
All telecom operators have introduced products possible within regulatory limits
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MNO Agent Structure

MNO Storefronts
- Tunisia Telecom: 100 owned
- Tunisiana: 85 outlets, 600 POS terminals
- Orange: 16 exclusive agents, 400 POS

Distribution Partners:
- **Tunisia Telecom**
  - 4-5 distribution partners - some exclusive
- **Tunisiana**
  - 8 distribution partners - all exclusive
  - Some partners have 4-5 levels
- **Orange**
  - 5-6 distribution partners - non-exclusive

Airtime Resellers
- Tunisia Telecom has 10,000 of their own agents, used to be exclusive but regulator forced them to open up. Have access to another 35,000 - 40,000 through partners
- Tunisia’s distribution partners provide a network of 36,000 to 40,000 agents
- Orange claims that their network exceeds 65,000 agents

- Approximately 200 modern food retail outlets
  - 2 Hypermarkets (> 5,000 sq meters)
    - Carrefour: 43 locations
    - Geant: 1 location
  - 146 supermarkets (500 - 5,000 sqms)
    - Monoprix: 80 locations
    - Magasin General Group: 66 locations
- 100 superettes (< 500 sq meters)
- 250,000 neighborhood shops (20-50 sqms)
  - Handle 80% of retail food sales
  - Draw customers from a 500 meter radius

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• Mobile Financial Services Landscape
# MFS Implementations

Due to regulatory limits, there are no mobile money implementations in Tunisia. Almost all big banks have additive mobile banking channels, but uptake has been limited. MNOs and third-party providers are interested, but waiting for regulations to change.

<table>
<thead>
<tr>
<th>Implementation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>MobiDinar</td>
<td>A mobile channel for the Post Office’s eDinar card, which is used primarily by students. Tunisie Telecom is offering the Post Office a mobile version that allows customers to pay bills. Cash-in can occur thru bank account, Internet, or ATM transfer, or at post office branches. Cash-out, if required, is through ATMs. Suggestions that there was limited take-up due to a poor user experience.</td>
</tr>
<tr>
<td>M-Dinar</td>
<td>Driven by ViaMobile, which holds brand and views itself as a mobile financial service provider. Goal is to offer money transfer, airtime top-up, loan payments, and a range of other financial services. However, implementation was put on hold by the government. Product was to be offered in partnership with Tunisiana, BIAT, and ENDA. Still trying to move forward, but in a limited manner. Begs for help with regulators.</td>
</tr>
<tr>
<td>Mobi-Bank</td>
<td>Technology solution developed by Tritux to provide a mobile channel to banked customers. Solution is currently offered by Attijari Bank. Tritux also working with Banque de l’Habitat and Banque National Agriculture.</td>
</tr>
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</table>