República de Moçambique
Ministério dos Transportes e Comunicações

Developments in the Field of Information And Telecommunication

International Security

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Executive Summary

This document describes the entirety of the state of the art of the telecommunication infrastructure and security measures provided by the government of Mozambican. The government has worked intensively with all telecommunication operators to ensure that laws and legislation is drawn to support and prevent all type of crimes perpetrated on the TCP world.

The government worked intensively in creating conditions to allow ICT cervices to reach the entire corner of the country.

The country has worked intensively on developing new means and ways to provide access to ICTs with security for end users. Few problems have with introduction of ICTs in the country; the existing problem have not yet been dealt as cybercrime, instead in most of the cases they are described as frauds. Capacity building and experts advised are the highest requirement to allow Mozambique to draft a law that allows the country to prosecute and detain people who perpetrate crimes such as cyber bulling, cyber-attacks, invasion of privacy, etc.

The field of Information and Telecommunication in Mozambique

Mozambique has invested heavily on ICT projects aiming to reduce the digital divide; with it problems o security have arisen. Such problems range from theft of devices to small cyber crimes. Bearing this i mind the country has invested in creating laws and legislation to protect law-abiding citizens from the type of crimes.

The investment on ICT is mostly being implemented on eGovernment aiming to reduce the distance between government services from rural communities, this investment is also being implemented i create a patterns of segmented integration of government related services. The investment is being don in Electronic Government Network, Government Portal, State Financial Administration System Mozambique eGovernment Communication Infrastructure project, National System of Civil Registration Biometric Driving Licence, Motor Registration Systems, Biometric ID Card and Passport, Crimina Registration System) and Digital Divide (Provincial Digital Resource Centres, Multimedia Communit Centres Programme). To enforce security on the use of mobile communication technologies the countr started to enforce the registration of SIM card and also create legislation for international telecommunication traffic control.

Example of telecom crimes:

> *The most frequent type of crime present in Mozambique is related to the use of SMS to request receivers of this SMS to transfer a certain amount of money to a bank account or balance to a mobile phone. These scams are frequent connected to informing the receive about a merchandise or item of interest, that if the balance or transference is done he or she will receive the goods sent by a relative.*

> *Another frequent type of crime is the use of calls informing the receiver of the call about the Credit card being blocked and providing online assistance for the unlocking process of the card. Once the user is inside and ATM, the procedure is to direct him to wire money to bank account.*

Solution

For this type of crime, there haven't been so much development about how to solve or support th mitigation of this cases, the only option found is to advice people about this type of crime and let them know that this schemes do exist.

The eGovernment network in Mozambique

The eGovernment project in Mozambique started in early 2004, the pilot phase aimed at providing necessary support and framework for technical requirements, and communication protocols.

During the pilot phase central levels of the government institutions located in Maputo were connected this institutions here mentioned where Ministers, and adjacent institutions. Due to the successful implementation of the pilot phase, the extension Phase took place benefiting 4 to 5 institutions at provincial level. From 2010 a third phase expanded connectivity to the districts aiming to cover all of the 128 existing districts in Mozambique.

The Government Portal

The Government Portal initiative aimed at providing a single entry point to Government information and services, which are organized according to the interests, and needs of citizens, allowing access 24X7, to anyplace and anywhere. The Government Portal was launched in 2006.

Following several Provincial government web portals have being developed and at this stage forms are being added through which citizens can access the eGovernment services provided.

There is also an effort being developed to host all government related ICT services on secure (physical and technological) location, to ensure and reduce cost of hosting ICTs in the country.

SIM Card Registration

The mobile SIM card registration aims to contribute to the protection of citizens against criminal acts that can be perpetrated using the mobile phone, contributing to the maintenance of public order and tranquility. This regulation was approved in 2010 and all mobile subscribers are required to register the sim card.

State Financial Administration System eSISTAFE

The State Financial Administration System (e-SISTAFE) was implemented to provide finance administration services through the Internet using a single Bank account for all government institution expenditures. Through this system the institutional budgets are assigned and monthly reports are also presented allowing the Ministry of Finance to present the annual State Financial Report in a timely fashion, present quarterly reports about the execution of the budget and submit the proposed State Budget to the Parliament before 30th September each year.

This project also demonstrates that government transactions such as G2G (government-to-government) G2B (government-to-business) and G2C (government-to-citizen) can be done more effective and efficient when availed electronically so long as all the security mechanisms are taken. The Ministry of Finance through the Development Centre of Financial Information Systems (CEDSIF), is implementing this project

Mozambique eGovernment Communication Infrastructure Project (MEGCIP) (2010 - 201

MEGCIP aims to support the Government of Mozambique efforts to lower communication costs by using international capacity to extend the geographic reach of the broadband networks and contribute improving the efficiency and transparency through e-Government applications. This project is hosted the Ministry of Science and Technology and consists of components focused on communication infrastructure, policy and regulation, eGovernment applications and institutional capacity building. Th

Ministry of Science and Technology, National ICT Institute (INTIC), The Ministry of Transport and Communication and the Mozambican National Institute of Communications (INCM) implement different parts of the project components.

ICT Legal and Regulatory Framework

A proper development and implementation of ICT initiatives requires a legal, regulatory framework, which also protects against different forms of electronic abuse and crime. Thus, the Government is defining a set of regulations to ensure a balanced and equitable development of ICT infrastructure, adoption of solutions and cryptographic codes less susceptible to violation, combat the violation of citizens' rights and attempts against public order and social and cultural values, especially pornography, abuse and violence against women and children via the Internet. To realize this, the Electronic Transaction Law was prepared and other set of regulations will be also put in place.

Provincial Digital Resource Centres (CPRDs)

Provincial Digital Resource Centres (CPRDs) concentrate ICT infrastructure, skills and investment providing a single entry point for ICT deployment and activity in the provinces, stimulate local demand and use of ICT by all sectors of development and support capacity building and development of local content. The first CPRDs were established in 2004 in the Provinces of Inhambane and Tete.

Based on demonstrating an impact in these provinces through the provision of ICT training course computer maintenance, network administration, data base designs and many other ICT services that were not offered at a provincial level further funding was provided to facilitate the extension of these facilities in 6 more provinces (Nampula, Gaza, Sofala, Zambezia, Cabo Delgado and Niassa) from 2005 to 2009

The CPRDs have been working as local hubs with a multi-sectoral and multi-functional approach, fostering linkages with local media to multiply the benefits of Internet connectivity and rural access to information reducing internal digital divide.

National System of Civil Registration (SINAREC)

Mozambique does not have a central registration system to register its population from birth and citizen do not have a unique personal number. To the contrary there are different ID Cards/documents that are issued independently by different ministries, such as ID Card, Election Card, Military Card, Health Card Driver License Card, Passports and other identification documents.

This project is one of the fundamental corner stones in Mozambique's national eGovernance strategy. aims to efficiently and effectively plan for and implement social services for citizens, promote democracy through the availability of efficient and correct registers for voting, promote an efficient, effective and fair government, etc.

The project will run in phases, with a Pilot Phase which will apply a birth registration system with a unique ID number to a chosen set of 1000 peoples and pilot the registered population as the core of the eGovernment initiative including investigating and testing integrations and interoperability to the rest of the eGovernment projects.

Biometric Driving License and Motor Vehicle Registration Systems

This system is used to produce new driving license cards without the use of special equipment, which has visible security features to facilitate a quick visual check, and it contains invisible and/or confidential

security features for a second-level check.

The Motor Vehicle Registration System is used to register motor vehicles, issue registration plates and motor vehicle permits, deregistration of motor vehicles, change of vehicle particulars, change of ownership of a motor vehicle, financial information and accountability, transaction auditing and management information reports. The two systems developed to provide driving licenses and vehicle number plates match the standard and format used in the SADC region.

Biometric ID Card and Passport

The new ID card is a huge step forward in solving problems of citizens who previously had to wait for months or even years for their ID cards. It incorporates biometrical features, which are used to establish a person's identity, which can later be compared with stored reference data. The biometric identifiers used in this card are the fingerprint and the facial image, making it a secure identification document that is difficult to forge.

Criminal Registration System

This application aims to facilitate the exchange of records between the provincial delegations and central institutions about the criminal status of the citizens, which is then used to issue criminal certifications in a more timely fashion. This certification is often required for new employments, bank loans etc.

Multimedia Community Centers (MCC) Programme

This program aims at providing a means by which the community has access to information using a wide range of information and communication technologies through a single point. The CMC project in Mozambique consisted in merging community radios with telecentres. The Telecentres are centers which provide access to ICTs meanly the Internet, e-mail, access to computer training (word, excel, power point).

This is the government main weapon to bridge the digital divide, as these centers are equipped with technological infrastructure to serve rural communities and provide access to technologies at the micro level.

SchoolNet Mozambique

SchoolNet Mozambique is a nationwide network of professional educators and schools working to make the Mozambique educational system competitive by preparing in-school youth for Internet connectivity and technology. The network aims to enhance learning opportunities for students, teachers, and the surrounding community via the Internet. SchoolNet is also seen as a way to prepare Mozambican students for work in the Global Information Society.

Students and teachers in the SchoolNet network use the internet as a learning tool. Mozambican students have participated in Internet-based exchanges such as the Global Environment Youth Convention and the Math.