

## **IT Annual Report 2012/13**

### **Key objectives during year under review (aligned to MTEF)**

- i. To have the wide area network (WAN) network operational to the maximum with the least latency and have redundancy in place.
- ii. The local area network (LAN) should be expanded to cater for all users.
- iii. To cable the IRD Building
- iv. To use physical servers in the most optimal way by virtualization.
- v. To get backups well organised and functioning on the Microsoft Administrative System
- vi. To upgrade Microsoft Administrative System modules to the latest software versions
- vii. To have hardware in a functional condition with regular maintenance.
- viii. To have a Storage System in place

### **Key achievements (including on outputs as per MTEF, where possible, indicate KPI)**

1. Asycuda (Customs Technical)
  - Continuing support on current application, Asycuda ++, whilst testing familiarizing with the new version, ASYCUDA World.
  - A Technical mission from Geneva to Namibia took place to establish any additional ICT requirement for the new system after which newly acquired IBM file servers for AsycudaWorld were purchased and installed.
  - The various libraries for the Asycuda World were developed with the aid of the purchased SO-Class software.
  - A second Technical mission from Geneva to Namibia took place during which Asycuda World was configured
2. Cloud Computing (Customs Technical)
  - Continuity of system configuration which was completed during the third quarter
  - The prototype was demonstrated where an exchange of files between the two systems (Namibia and Botswana) was realised.
  - During the last quarter of the year operational testing as well as stress tests for both Customs Administrations was conducted to rectify identified issues. This led to the request of source code from Geneva for the Asycuda system as the developers faced programming issues to interface Asycuda with cloud data. Initiative on hold until a solution is found to obtain the source code or develop an alternative solution
3. Attendance of the WCO IT Conference in Tallinn, Estonia with the theme “IT Transforms Core Business for Customs and its Stakeholders”; this will give way to the implementation of various systems that will ensure that customs will be technically at par with other customs administrations.
4. SACU Data Exchange
  - Participated in the meetings that will usher the exchange of trade data within the SACU region. This project runs parallel with the Microsoft Cloud Computing

project between Namibia and Botswana; with similar expectations. The South African Revenue Authority and Swaziland Revenue Authority are also involved in a similar project and decision of the systems that will be implemented for the SACU data exchange will be based on who achieves the full data exchange as stipulated during the SACU data exchange meetings

#### 5. IFMS Database/Server

- Update of the servers and database to be compatible with the new release of the IFMS
- The WAN had an optimal operational time of 98%. This was achieved with a 24/7 monitoring system by the Network System Provider. Remote border posts like Omahanene, Katwitwi and Muhembo have been fitted with WiMax, due to the absence of digicon lines.
- The Local area network has been maintained throughout the Ministry due to maintenance trips to regional offices and border posts.
- Various physical servers of the Microsoft Administrative System (MAS) have been virtualised to run more than one system simultaneously, thus optimising the use of the servers. A backup system (Backup Exec) have also been installed on both the Primary and Secondary servers to synchronise the backups. Server 2008, ISA 2006 and Exchange 2007 have been upgraded to the latest versions.
- Due to Maintenance trips by IT technicians to the Regional offices and Border Posts three times a year, less downtime on printers and computers are now reported. During these trips, software updates and virus removal is also done. The network equipment is also checked, repaired or replaced.

#### **Reforms undertaken (in a specific year)**

#### **Budget Execution (for specific year)**

#### **Challenges (only those remain unresolved)**

##### 1. Staff

- Staff not adequately trained. Require additional training in Java and RDBMS products, especially for the ASYCUDA World implementation and ASYCUDA ++ support
- Shortage of staff - additional staff required
- Lack of motivation as a result of the lack of skills transfer from consultants
- Demotivation of staff members to go the extra mile due to the negative outcome of the regarding exercise

##### 2. Network:

- Ministry of Finance network shows sign of fatigue, bottleneck in data transmission
- Customs stations would require major bandwidth increase

Some Customs remote stations have no network facilities Bandwidth will always be a challenge due to the high cost and the increasing use of internet. This is also complicated to determine if it is being used for recreation, research or work related operations.

Redundancy on network lines also posed a challenge due to the rejection of VSAT as an option. The latency on ASYCUDA was too high (up to 900ms). Research for alternative redundancy options is still ongoing.

The cabling of the IRD building was delayed but it is still in progress and almost complete.

Due to the rapid expansion of data on the File Servers, an alternative was to use a Storage System where massive data can be stored. This project was postponed for the Backup System to be in place .

Due to vast distances, rapid response on equipment repair and replacement thereof is always a challenge. This will be solved if technical staff is stationed in the regions.

## **Conclusion**