SADC CUSTOMS
INFORMATION COMMUNICATION TECHNOLOGY STRATEGY

Approved By Sub Committee on Customs Cooperation in May 2013
Contents

1. Introduction ..................................................................................3
2. Background .................................................................................4
3. Vision .........................................................................................4
4. Mission .......................................................................................5
5. Strategic objectives .....................................................................5
6. Environment ................................................................................5
7. Strengths, Weaknesses, Opportunities, Threats .......................7
    Weaknesses .............................................................................7
    7.1 Risks ...................................................................................7
    7.2 Common Challenges .........................................................8
    7.3 SADC Regional Strengths and Weakness ...............................8
8. Principles ....................................................................................9
9. Approach ...................................................................................10
10. Implementation and execution of the SADC ICT Strategy ..........10
    Annex A ı Regional Initiatives .................................................11
    Annex B ı National Initiatives ................................................16
    Annex C ı SADCOM Workplan 2012-2013 .......................Error! Bookmark not defined.
    Annex D ı Survey of Regional Initiatives and Developments (Template)Error! Bookmark not defined.
    Annex E ı SADC Organogram ................................................Error! Bookmark not defined.
1. Introduction

1.1 This document seeks to outline a SADC Customs ICT Strategy that will enable Member States to effectively implement provisions of Article 6 of
1.2 It will apply to Revenue and Customs Authorities / Administrations of the SADC Member States that have signed and acceded to the SADC Protocol on Trade and its related Annexes.

2. Background

2.1 Through the Regional Indicative Strategic Development Plan, SADC Member States recognise the importance of ICT in meeting the challenges posed by globalisation, facilitating the regional integration agenda, and enhancing the socio-economic development prospects of the Region. It is in this context that SADC Member States have agreed on the need to develop an all inclusive, balanced, and socially equitable information and knowledge-based society that is founded on co-ordinated national strategies to effectively integrate ICT into regional development policies.

2.2 Article 6 of Annex II of the SADC Protocol on Trade provides the legal basis that supports the regional collaboration on computerisation of Customs operations, development and consider where possible adoption of common Customs application systems and use of internationally accepted standards, especially those adopted by the World Customs Organization, United Nations Economic Commission for Africa and UNCTAD.

2.3 The scope and the objectives of the Subcommittee on Customs Co-operation (SCCC) as established in terms of Article 11 of Annex II of the SADC Protocol on Trade, makes provision for Member States to create a platform in order to collaborate on Customs initiatives that seek to provide practical solutions to common challenges identified.

2.4 At its 22nd meeting in July 2012, the SCCC resolved that a SADC Customs Information Communication Technology Strategy be developed that will identify, prioritize and harmonize ICT initiatives within SADC.

2.5 A workshop was subsequently held from 09th -12th October 2012 in Mauritius to develop the SADC Customs ICT Strategy in line with the Article 6 of Annex II of the Protocol on Trade on computerization of Customs operations.

3. Vision

3.1 To be the leading and seamlessly interconnected customs ICT environment within Southern Africa!
4. Mission

4.1 Our mission is to provide reliable and sustainable technology solutions to support trade facilitation systems, processes and data exchange to promote a transparent and professional environment for collaboration amongst customs administrations within the region.

5. Strategic objectives

5.1 General Objectives

The objective of the SADC ICT Strategy report is to further promote reforms and continuous modernization of the SADC Countries Customs Administrations.

5.2 Specific Objectives

5.2.1 SADC Member States have already commenced work towards the following common goals:

- Harmonised data exchange and IT interconnectivity. The WCO’s Globally Networked Customs (GNC) approach, including the WCO Data Model that will serve as the tool to ensure harmonised development.
- A Regional Transit Management Information System.

5.2.1 The SADC ICT Technical Committee is at the same time mindful of the ambitious targets set by the SCCC as per the Strategic plan 2012-2016, and may need to revisit the scope of its regional objectives set out above if required.

6. Environment

6.1 In order to meet this mission, Customs administrations must effectively integrate modern practices and processes with ICT driven Customs management systems because ICT enable Customs to increase the quality of their control activities while, at the same time, enhancing their level of trade facilitation. An effective Customs administration that leverages technology can lead to improved transparency, greater efficiency, and enhanced security. The automation of Customs processes and procedures and the use of ICT are strongly recommended by the World Customs
Different Customs Administrations are at different levels of modernization and automation. An assessment of the current automation status of Customs administrations was carried out in October 2012 and is as per Annex X. However, considerable effort has been noted such as the implementation of the paperless declaration concept, single window concept, electronic certificate of origin, Port Community System, nCEN (for enforcement purposes), data interchange and use of non-intrusive inspection equipment. In addition to being recommended by the World Customs Organization, these trade facilitation instruments also enhance the trading environment thereby reducing the cost and complexities of doing business.
### Strengths (Internal)
- Political and economic stability in the Southern African region
- Traders who are by and large ICT receptive.
- National stakeholder partnerships
- Existence of Bilateral initiatives
- Ongoing Regional initiatives
- Existing strategic partnerships - potential for expansion

### Weaknesses (Internal)
- Varying level of technological development/infrastructure between Member States.
- MS using different data structures.
- MS belonging to multiple different RECs.
- Lack of regional ICT approach.
- Poor turnaround times in exchange of information
- Poor mechanisms for addressing

### Opportunities (External)
- Readily available policies and frameworks (not going into unchartered waters).
- Possible joint development effort with COMESA (and EAC?), for Transit Management System.
- The advancements in technology such as SOA allows easier exchange of data
- Leverage with the SADC Organ WAN project

### Threats (External)
- Transnational crime

### Weaknesses

#### 7.1 Risks
Some of the common risks identified by Revenue and Customs Authorities/Administrations in the region relate to:

- Level of technological development including infrastructure between Member States varies;
- Organisation composition of the member states - i.e. Customs Department, Revenue Authority, and Border Management Agency;
- Customs administrations using different data structures within their IT systems. Membership to different RECs;
- Lack of capacitating legislation in member states; and
- Lack of a regional legislative framework for data interchange
- Inadequate funding for some member states.
The nature and magnitude of the risks vary from country to country.

7.2 Common Challenges

Some of the common challenges identified in facilitating trade in the region include:

- Different legal provisions administered by various Member states
- Lack of a regional approach in ICT;
- Poor turnaround times in exchange of information;
- Poor mechanisms for addressing integrity in member states;

7.3 SADC Regional Strengths and Weaknesses

National stakeholder partnerships
Customs administrations partner with security and other enforcement agencies that are established in member states. Such partnerships include:

- Government agencies such as the police, immigration, state security, health, agriculture, etc.
- Private sector bodies such as clearing agent associations, port and airport community, chambers of commerce, etc.

(The above represents both an opportunity as well as a risk)

Bilateral initiatives
Member states are implementing Mutual Administrative Assistance agreements that support joint or parallel enforcement activities within their territories.

Strategic Partnerships
Customs administrations may partner with both inter- and non-governmental bodies such as SADC, WCO, UNECA and UNCTAD to strengthen ICT capacity.

Regional initiatives
Customs administrations in the Region will leverage on other ICT agencies / bodies and initiatives available from regional and international organisations in enhancing regional ICT capacity. Such capacities will include:

- Data Exchange and IT connectivity
- Regional Transit Management system
One Stop Border Post initiatives
Non-intrusive Inspection initiatives
Modernisation Projects: Customs administrations in member states are undergoing modernisation initiatives which are an opportunity to enhance enforcement systems, e.g. risk engines in the region.

8 Principles

Customs administrations should ensure that their respective IT systems are interoperable. To this end, Member States need to be mindful of the following international norms and standards in the development and implementation of ICT related projects.

8.1 Revised Kyoto Convention

The Revised Kyoto Convention, being a “blueprint” for modernized Customs, defines guiding principles for the use of ICT in its General Annex Guidelines chapter 7. The use of international standardized and harmonized information definitions and messages is one of the paramount principles. Combined with the recommendation that countries require as little information as necessary for cross border control purposes, the ICT principles contribute to the global trade facilitation applying a risk management based approach to the necessary processing of international trade.

8.2 Revised text “Alignment to the WCO Data Model”

Customs administrations should ensure that their respective IT systems are able to interconnect using standardized information and messages in paperless cross border procedures. To this end, Customs should use the WCO Data Model, which defines a maximum set of data for the accomplishment of arrival, departure, transit and release formalities in a single window environment covering the cross border movement of goods, people, means of transport and transport equipment. The Data Model also defines the electronic message formats for relevant Cargo and Goods declarations.

8.3 Automation

Using minimum information requirement to accomplish procedures at arrival, departure, transit and release combined with standardized data and messages, Customs administrations are provided with the opportunity to apply automated processes. High levels of automation will
8.4 Supporting Documents

Principles for the management of supporting documents for international cross border trade have been defined by the Permanent Technical Committee of the WCO. This principle entail that supporting documents should not be requested at all in the first instance. However, if necessary for the release of goods at arrival, departure or transit, such documents should be possible to submit in a dematerialized format. These principles, as laid down by the WCO, should also be embraced by the SADC Member States.

9 Approach

9.1 Regional initiatives are predicated by decisions taken at the SCCC. Therefore it is imperative for the regional agenda to address and underpin such to facilitate the delivery of these decisions. The current regional approach is outlined in Annex A. A detailed project plan covering the full scope of regional initiatives concerning data exchange and transit management is contained in Annex C.

9.2 National initiatives undertaken by Member States will continue in their progress as these underpin the economic, social and fiscal needs of sovereign states. For purposes of oversight, the SADC Secretariat will monitor such national developments according to a specified survey. A template for such survey is contained in Annex D.

9.3 To ensure better understanding of the working and reporting of SADC, an organogram depicting all the structures and reporting channels is contained in Annex E.

10 Implementation and execution of the SADC ICT Strategy

10.1 The SADC ICT Strategy will be implemented by member states according to their level of readiness. The approach being followed under the WCO’s GNC Utility Block allows for implementation of SADC ICT Strategy on a bilateral and/or multilateral level by early adopters.
The regional connectivity approach will be predicated by bilateral or multilateral initiatives by early adopters. For this reason regional IT connectivity and Information exchange initiatives (SADC and SACU) mirror the bilateral initiatives currently being undertaken by Member States. Regional interventions may include:

- Oversight of the status of each Member State’s readiness for connectivity and data exchange.
- Identification of Member States ICT capacity requirements.
- Peer review of bilateral or multilateral initiatives.
- Identification and promotion of initiatives and processes that will aid regional integration and improved facilitation.
- On-going development towards a common harmonised transit management requirement for the region.
- Regional Customs Interconnectivity through the SADC Organ on Politics, Defence and Security Affairs WAN project.

A. 1 CUSTOMS-2-CUSTOMS INTERCONNECTIVITY AND DATA INTERCHANGE

Customs to Customs connectivity fulfils the gap which currently exists within international supply chain data exchange. It seeks to reinforce customs ability to make rational decisions in real-time as to the integrity of trade data supplied by stakeholders. No longer will Customs rely solely on the integrity of trader supplied information, but will be equipped with advance knowledge (Commercial Track) of what cargo is destined for arrival and clearance, as well as the possibility of advanced enforcement and risk information (Enforcement Track), which are the complimentary components of the World Customs Organization Globally Networked Customs (WCO GNC) Strategy.

Background

Customs administrations we communicate in order to manage the flow of goods and people across national borders. At a country level, Members will continue to have exchange of information arrangements as a key component of their business plans.
Without a global approach and common purpose to connectivity, there is a risk of failure to meet the challenges posed by today’s “just in time” world. As such the importance of connectivity is the WCO’s central theme for 2012 – “Customs connect, Borders divide”.

WCO Globally Networked Customs Interconnectivity Concept

The WCO GNC is about harmonising the processes and data exchange between Customs administrations. GNC as such establishes a universal standard for data exchange and IT connectivity. The benefits include advance and credible information; earlier risk assessment and decision-making; higher levels of transparency; better resource and revenue management. For the private sector stakeholders, GNC will bring faster clearance and release; consistent and predictable treatment; reduced costs through cross-border modernization, and increased transparency and voluntary compliance.

The GNC concept outlines how Customs administrations may develop a data exchange mechanism based on the WCO GNC Interconnectivity or Data Exchange Utility Block, align their systems and effectively exchange Customs data bilaterally and regionally. This model facilitates creation of an e-Customs network with seamless, real-time and paperless flows of information and connectivity. IT Connectivity is a vital building block in supporting the Customs to Customs pillar of the SAFE Framework of Standards and also supports domestic and regional Preferred Trader and AEO programmes for the benefit of key traders.

In June 2012, the SCCC adopted the WCO GNC Interconnectivity Utility Block in the implementation of data exchange on a regional level and bilateral level.
Background
The SADC Protocol on Trade, Annex 4, provides the SADC ICT Strategy for the establishment of a regional transit regime and transit guarantee chain system.

The Memorandum of Understanding on the COMESA-SADC Transit Management Information System supports the development of a joint solution to meet the needs of Member States and actively promote the modernisation of Customs administrations in the regions through the adoption and implementation of appropriate enabling systems and technologies.

Based on the findings and recommendations of the SADCOM Transit Management System Study Report in December 2011, a harmonised solution is proposed which incorporates elements from the transit management system that was developed by COMESA and SADC.

The 22nd SCCC meeting has approved the work plan that was agreed and approved by the Heads of ICT and Transit Experts in May 2012. The plan defines a phased approach to implement a future SADCOM system that is based on the five pillars of specification and design and follows a distributed, multi-vendor architecture and integration with national systems.

Objectives
The proposed SADCOM solution aims to;
- realise a regional data exchange and transit solution, enabling the timely exchange of electronic data between regional member countries and promote the reduction of paper based processes,
- share critical customs information to advance real-time information sharing, enable risk management prior to arrival and allow data matching if required,
- reduce the administrative burden of traders and reduce the processing time at the border,
Definition

The SADCOM solution will be developed based on five pillars -
1. **Connectivity and data exchange** - Provision of real-time data exchange, supported by defined SLA and guaranteed turn-around times
2. **Risk management** - National risk assessment and mitigation supported by the exchange of regional enforcement and risk information
3. **Track and Trace** - Creating visibility of goods movements and reporting
4. **Bond Management** - Managing the regional bond and chain of responsibility.
5. **Legal** - SADC ICT Strategy as the enabling mechanism for the elements above.

Connectivity and data exchange will be realised by implementing the WCO Global Networked Customs (GNC) Interconnectivity Block and will form the basis of Customs-to-Customs (C2C) connectivity. It will create a basis from where future integration solutions can be designed.

Risk management will utilise the WCO CEN network for the exchange of enforcement data.

Common infrastructure and services will provide the minimum technical glue to interconnect the solutions in each of the Member States. Integration components will connect the current and legacy national solutions to the common infrastructure, which will be developed in co-operation with vendors and Member States.

**Benefits**

The SADCOM solution will realise a number of benefits in the following areas;

**Best practices and standards**
The proposed solution is based on current technology standards and best practices, ensuring long term viability of the investment.

An open SADC ICT Strategy of data standards and business processes promotes an integration approach with national system irrespective of the vendor or technology. The use of platform agnostic standards reduces vendor locking and provide the opportunity for open source solutions.

**Leveraging existing investments**

It takes into consideration the substantial infrastructure and software investment Member States have made in current and legacy systems, re-using these software systems through extension and integration.

**Accuracy and efficiency**

The promotion of electronic data capture by the trader offloads that responsibility from customs, which improves quality and accuracy of data and frees resources to attend to other tasks.

**Business benefits**

Advantages for business includes the reduction of costs due to less administrative and regulatory overhead due to simplification and reduced paperwork. Administrative optimisation will result in less time at the border for low risk traders and transactions. Logistics processes will be streamlined with improved predictability, promoting just-in-time supply chain processes resulting in reduced inventory.

**Economic and societal protection**

The use of electronic data exchanges and pre-arrival clearance, in favour of paper-based processes, will reduce corruption. Further, the risk assessment capabilities will increase the ability to detect cross-border smuggling.

**Security**

Modern and proven standards-based security measures will be implemented to protect data in storage and during communication between Member States without the need for dedicated physical networks and associated infrastructure.

**Expansion**
on general distributed architecture principles, allowing it to grow as future requirements are identified, extending the initial investment.

**A.3 WIDE AREA NETWORK INITIATIVE**

Individual SADC Member States Customs administrations have each elected to employ the customs processing systems they deem appropriate to their situation. Eleven of the 14 States have adopted the systems of their choice such as ASYCUDA, TIMS, CMS and various legacy systems. The current challenge is that the various systems are not compatible and unable to interconnect to each other.

A project is currently being implemented by the SADC Organ on Politics, Defence and Security Affairs with a view to facilitate communication between the Regional Early Warning Centre (REWC) at the Secretariat and the Member States. The main satellite hub has been installed at the SADC Secretariat and satellite dishes are operational in Angola, Botswana, Mozambique, Namibia, South Africa, Zambia and Zimbabwe. It is expected that the entire REWC wide area network will be operational by December 2013.

Provision is being made for regional programmes to leverage on the REWC infrastructure REWC for electronic communication and information exchange between Member States and with the Secretariat. Necessary control features will be implemented so that there is segregation of traffic, thus ensuring security and confidentiality of the information being transmitted. The advantage of this approach is that programmes will only have to pay for the additional bandwidth that will be required by each individual programme and that the network is dedicated and secure.

However, it is to be noted that the WAN is just communication link between the Secretariat and the MS. The use of the WAN for Customs applications like data exchange, e-learning, interface between different Customs Information System and transit management information system will come at a different stage and will require additional appropriate resources.
Annex B – National Initiatives

National ICT initiatives will be implemented taking into consideration national Governmental priorities, readiness of the Member State and the need to build on regional agenda. National ICT initiatives include but not limited to:

B.1 SINGLE WINDOW CONCEPT

Background

Companies involved in international trade, regularly have to prepare and submit large volumes of information and documents to governmental and regulatory authorities to comply with import, export and transit-related regulatory requirements. This information and documentation often have to be submitted through several different agencies, each with its own specific (manual or automated) systems and paper forms. This extensive requirement, together with the associated compliance costs, constitutes a serious burden to both governments and the business community and is also a serious barrier to the country’s competitiveness.

Southern Africa continues to lose export business because of Administrative Non-Tariff Barriers; these barriers include delays, lack of transparency and consistency in customs procedures, overly bureaucratic and arbitrary processing methods and documentation requirements for consignments, high freight and transport charges and generally, services that are not user friendly.

Single window refers to an internationally recognized SADC ICT Strategy for addressing the need for coordination of multiple agencies involved in cross-border trade in any country. The Single Window is defined by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) as “a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements.”
Many Governments in Southern Africa have made a decision to undertake a Single Window project as a measure towards improving the country’s trade facilitation initiatives, whereby trade related information and/or documents need only be submitted once at a single entry point. The blueprint for a national single window includes increased system accessibility and user-friendly functionality, improved data access, and security all built upon a foundation of internationally harmonized and standardized data.

**Benefits for Government**

A Single Window will lead to a better combination of existing governmental systems and processes, while at the same time promoting a more open and facilitative approach to the way in which governments operate and communicate with business. Traders will submit all the required information and documents through a single entity. Effective systems will be established for a quicker and more accurate validation and distribution of this information to all relevant government agencies. This will also result in better co-ordination and co-operation between the Government and regulatory authorities involved in trade-related activities.

**Benefits for trade**

The main benefit for the trading community is that a Single Window will provide the trader with a single point for the one-time submission of all required information and documentation to all governmental agencies involved in export, import or transit procedures. As the Single Window enables governments to process submitted information, documents and fees both faster and more accurately, traders would benefit from faster clearance and release times, enabling them to speed up the supply chain. In addition, the improved transparency and increased predictability would further reduce the potential for corrupt behaviour from both the public and private sector. If the Single Window functions as a focal point for the access to updated information on current trade rules, regulations and compliance requirements, it will lower the administrative costs of trade transactions and encourage greater trader compliance. The Single Window will additionally act as a
B.2 E-CERTIFICATE OF ORIGIN

Objective

The electronic submission of certificate of origin is one among various WCO initiatives to meet international conventions and best practices while keeping pace with the fast moving trade changes. In the quest to increasing trade facilitation and reducing dwell time, the Web-base e-certificate application is the solution.

Current Process

Exporters or their representatives submit necessary documents in hardcopy to the Origin Unit and call in person to have their certificates processed and wait for their endorsement.

New Process for applicants of SADC certificate

Registered applicants will have to submit their applications with scanned documents through the Service Provider Portal to Customs for approval thus minimizing their travelling time.

Pilot Testing

Two or three compliant exporters will be selected to participate for a one month pilot test with the objective to improve the existing procedures.

Time Frame

Being given the new e-EUR1 implemented in Mauritius has proven to be extremely efficient and effective for exporters, the implementation of the SADC certificate will require a short time delay of 2 months provided there is full participation of every stakeholder concerned.

Project Challenges
Compliance agreements and acceptance by other SADC members to access on the website for data verification prior to importation

- Legal amendments to be brought in the national Customs Regulations and SADC Regulations
- Awareness campaign to be done to stakeholders and new equipment required like scanner and upgraded internet capacity
- Training to be dispensed to Customs Officers of the new way of processing e-certificates

Conclusion

The e-Certificate of Origin is a very good initiative towards trade facilitation and promoting paperless environment in the Customs Administration. It is without doubt that the e-SADC certificate submission will impact positively on the overall processing time of issuance of certificates.

B.3 CUSTOMS ENFORCEMENT NETWORK (nCEN)

Objective

Intelligence is a critical element of enforcement for Customs administrations which have to perform enforcement controls while facilitating legitimate trade at the same time. The national Customs Enforcement Network (nCEN) project puts those administrations on the cutting technological edge. It provides a secure, cost-effective pathway to assist administrations to unlock key elements contained within the WCO Customs in the 21st Century Strategic Document, such as, Coordinated Border Management and a Globally Networked Customs. Customs administrations around the world play a vitally important role in the fight against transnational crimes. Therefore, the exchange of information is extremely important and the need to exchange nominal (personal) data between various countries, agencies and organizations has increased substantially.

The project will provide members with a variety of tools to meet the challenges of effective and efficient information exchange, including a national database application, uniform information sharing standards, and a mechanism to allow members to implement those standards for enforcement purposes, the Information Communication Interface tool (Icomm).
Cost Implications

- The nCEN and IComm software are provided for free by WCO, while all other costs such as the actual implementation, IT hardware, etc. will have to be borne by the Members implementing the nCEN / IComm package offering.

  - The costs for linking an existing national database to the nCEN have to be borne by the Members wishing to implement this solution.

Points to consider for implementation

- The nCEN will run on the servers of the Members implementing nCEN.
- The nCEN system is meant to be implemented at a national level, according to the national legislation on data protection and using national servers and granting all national security requirements.
- The possibility to feed other international databases will need specific agreements with other international organizations, and implementation of the technical solution.

Expected Benefits of project adoption

- nCEN will enable member countries to carry out intelligence-led operations and controls based on risk management without impeding the free movement of persons, goods and means of transport. Benefits may include increased revenue collection, more facilitation of legitimate trade, and better security.

  - The nCEN will give the Members the possibility to implement risk analysis on strategic, tactical and operational levels.

  - The nCEN with its interface tool (Icomm) will facilitate and increase the exchange of operational information amongst Customs administrations and other entities, thus improving the fight against transnational crime and revenue collection.

  - The nCEN package or just the implementation of the Icomm tool will enable Members to input data into the global CEN database and other international databases without entering the same information twice or more times.

Conclusion
Members are encouraged to adopt whichever aspect of the nCEN strategy that achieves the goal of getting critical and actionable customs information to customs officials as efficiently as possible so that all members can more effectively operate and protect citizens while supporting the shared goals of international customs enforcement.

B.4 PAPERLESS CUSTOMS

Objective

The Paperless Customs project is being introduced in view of reducing dwell time at Customs through the elimination of submission of hard copy of the Single Goods Declaration form as well as attached documents. This will reinforce the commitment of Customs to facilitate legitimate trade, increase transparency and abide by international conventions. The whole process of submitting a customs declaration will be done online and in a paperless manner. Customs may also mandate, in addition to electronic declarations the relevant supporting documents such as invoices, packing list, bill of lading, etc be submitted online.

Current Process

All documents (Declarations, Bill of lading, Invoices, Permits) are submitted in hardcopy to the Customs Department. Declarant and importers have to physically come to the Customs Department to bring these documents, queue up and wait for Customs clearance and payment.

New Process with paperless Customs

With the e-Customs Project, the importers and declarants will send their declarations electronically to Customs. Member states should endeavour to only require supporting documents in the event where a risk assessment requires such. National legislation should require traders to maintain either soft or hardcopy documents for post clearance purposes. All relevant documents will come to Customs Department as softcopy and no need for the importers/declarants to come
ICT Infrastructure Enhancement
Customs Department should enhance its ICT Infrastructure in order to meet the technical requirements of the paperless Customs Project. New storage with higher capacity (10-20 TB) must be ready to store commercial declaration and manifest data. Communication interfaces between Stakeholders and Customs Department must be upgraded for smooth data flow. Upgrade of infrastructure shall also be required at the declarants/importers side to adapt to the paperless environment. Member States should provide consider bulk scanning facilities at strategic hubs to assist the capture of stakeholder supporting documents. Tried and tested solutions already in operation should be considered by Member States wherever possible.

Pilot Testing
It is important to conduct a pilot test of the paperless customs with some declarants and importers to ensure smooth business operations and rectify any issues in the system and at the declarant/importers side.

Time Frame for Project Completion
The paperless Customs project is feasible in 6 to 12 months depending on the complexity of the Customs Administration and cooperation of stakeholders.

Project Challenges
- Legal amendments shall be done in order to accept softcopy of invoices and other related documents
- The data transmission charges shall not increase with the introduction of paperless declarations and attachments. The objective of the paperless Customs Project is to reduce cost of doing business and facilitate trade.
- The customs officers must be well trained and accept the change from current process to newly paperless environment. The management team must provide their full support in order to adapt to the new operations.
- Awareness campaign in order to convince all declarants/importers to adopt the paperless system at their side. Investment may be required by some declarants/importers to enhance their ICT infrastructure (Scanners and data lines).
The operations shall be monitored and well coordinate to ensure that the dwell time for clearance of declaration is being reduced.

Conclusion
The paperless Customs Project shall bring enormous benefits and shall facilitate that declarants/importers file their declarations, in a fully paperless manner. The project development and implementation require technical assistance from MNS and Customs CMS/IT sections, operational assistance from all sections in the Customs Department and also acceptance by declarants and importers to file their declarations online together with all the relevant documents attached. An awareness campaign is important to communicate all related information and procedures to the declarants/importers. Training shall be provided to Customs officers to acquaint to the new paperless procedures. After go-live of the system, the processes and procedures shall be reviewed and enhanced in order to attain the optimum and most efficient paperless environment.

B.5 E-PAYMENT INITIATIVE

Objective
The main objective of the e-payment project is to allow traders/declarants to effect customs payment electronically in a secure and reliable manner. This project is complementary to the e-Customs project where customs declarations and all relevant import/export documents can be submitted electronically.

The main idea is to speed up the payment and the customs declaration processes which will consequently expedite the customs clearance process.

Current Process
Payment of customs duties and taxes are effected by cash and cheques where the declarant or his representative has to come personally to Customs cashier’s office to settle the payment due.

New Process
Once a Customs declaration is validated by Customs official, the declarant/importer can send his/her Payment Instruction (PI) from his/her Front-End System via the
The Payment Instruction (P.I) message reaches the Bank simultaneously. Upon receipt of the PI message the Bank credit Customs' Account and sends an updated message to the declarant and Customs. It is to be noted that as soon as the PI message is received at Customs the duties and taxes are considered as paid and the Bill of Entry can be processed.

Network Infrastructure, Hardware and Software

The importer/declarant must have a Front-End System to be able to send the Payment Instruction and make prior arrangement with his/her Bank. For acquisition of a Front-End System, application by prospective declarants needs be submitted to Customs for approval. Once approved the service provider for Customs, shall proceed with the installation and training to the applicant.

Pilot Testing

With the collaboration of a few selected e-payment users, Payment Service Provider and Customs will carry out a pilot test to ensure correct sending/receipt of payment message updates and confirm that Customs A/C is credited.

Time Frame for Project Completion

This project is feasible in 6 to 12 months following awareness campaign with stakeholders and enhancement of Front-End System and the national Customs Automated System to allow the electronic payment messaging.

Project Challenges

- Stakeholders' education and acceptability as the e-payment system is still new.
- For the e-payment system to take off successfully, the stakeholder should be fully confident that the platform is secured.
- Insufficient funds in the stakeholders' bank account at time PI is sent.
- Wrong input of Bank Account No. in the PI message by stakeholder.
- Ensure that this new mode of payment is backed by appropriate legal mechanisms
The e-payment initiative is a perfect example of public-private sector partnership, which creates an enabling environment for a coherent and unified system of payment that not only promotes universal access of payment but improves service quality too. Moreover, confidentiality and transparency of the transfer of funds is enhanced. (Electronic payments are easy to trace and monitor, when compared to the cash-based payments). This project will also contribute in the reduction of transactional costs and facilitate and expedite Customs clearance.

B.6 IMPLEMENTATION OF E-LEARNING

Objective

The WCO e-Learning system was developed by WCO in response to the growing demands for training and technical assistance. Launched in 2003, it is a comprehensive, ground-breaking training tool which offers an integrated learning environment. The full package comprises of fifteen modules and is made up of two parts:

- Interactive courses gathering WCO knowledge on Customs matters
- A Learning Management System (LMS). It is a web application enabling the access and the management of the courses.

Benefits

The platform provides various benefits to Customs Administration as described below:

- Self Learning
- Learn at our own pace
- Capacity Building across Organization
- Materials benefit from WCO
- Learn best practices of Customs Administration
- Promote the efficient use of IT
- Experience real case scenario through case studies
- Online test through short quiz
- The module promotes dynamic learning where new materials are updated on the system
- Contents on the system are updated constantly

Since it is based on open source technologies, it is therefore important to deploy the open source Learning Management System platform to successfully accommodate the WCO e-learning modules. The platform is currently hosting 15 WCO modules.
and can also accommodate tailor made presentations by the Customs Administration. The following modules are currently deployed on the platform namely WCO Integrity, WCO Data Model, Data Harmonization, Intellectual Property Rights (IPR), TIR, Transfer Pricing, Istanbul Convention, Ozone-Depleting Substances and Rules of Origin. Additionally, SADC has also developed various modules such as SADC Rules of Origin; Tariff Classification etc.

The other interesting part of this project is its integration with the nCEN Platform which provides a holistic view of the risk management, enforcement tools and seizures in the Custom Administration.

Last but not least, the Online Exam Module in the E-Learning Platform provides quick accessibility to preparing Multi-choice questions for new recruits and the exams are done and corrected fully electronically without any printing and manual corrections, hence promoting paperless environment in the Customs Administration.

ICT Requirements

The E-Learning Platform can easily be hosted on a physical or virtual server environment. WCO shall provide the ISO Image for the e-learning module developed on Moodle and shall be deployed on a Linux environment. An experienced IT administrator is required to create login credentials for users, to load the materials in the required format and also to monitor access from outside (Officers can learn at home at their own pace). The system must be well secured and located in the Delimiter Zone for secure external access by users.

Time Frame

The project can be implemented within 3 months depending upon availability of a server for hosting and license approval by WCO and the Customs Administration. The first phase shall be mainly to internal access to allow the users to better understand the system. The second phase which can take another 2 months is providing access to users from external so that they can learn anytime and anywhere.

Conclusion
The WCO e-Learning Platform is a very powerful learning tool for Customs Administrations. Its user-friendliness, easy accessibility and up-to-date information contributes enormously in the training and development of Customs Officers. E-Learning platform should be a priority in the project implementation as it will catalyse the implementation of other projects since the officers from the various administrations shall be well trained to new project challenges. Also the e-learning platform will help in the development of a proper training strategy in the various administrations.

B.7 NON-INTRUSIVE INSPECTION EQUIPMENT

Non-intrusive inspection (NII) equipment and radiation detection equipment should be made available and used for conducting inspections, where available and in accordance with risk assessment. This equipment is necessary to inspect high-risk containers or cargo quickly, without disrupting the flow of legitimate trade.

B.8 PUBLICATION OF TRADE INFORMATION ON NATIONAL WEBSITES

The Revised Kyoto Convention provides for Customs to use information technology to enhance the provision of information. Customs administrations should consider using techniques such as the World Wide Web for all general information as well as non-restricted technical information, or producing their tariffs and other relevant information in an electronic form which can be rapidly accessed and amended.

B.9 SEALING

In the interest of supply chain security and the integrated Customs control chain, in particular to ensure a fully secure movement from stuffing of the container to release from Customs control at destination, Customs should apply a seal integrity programme as detailed in the revised Guidelines to Chapter 6 of the General Annex to the Revised Kyoto Convention (see Appendix to Annex 1 of the SADC ICT Strategy). Such seal integrity programmes, based on the use of a high-security mechanical seal as prescribed in ISO/PAS 17712 at the point of stuffing, include procedures for recording the affixing, changing and verification of seal integrity at key points, such as modal change.

Additionally, Customs should facilitate the voluntary use of technologies to assist in ensuring the integrity of the container along the supply chain.

CONCLUSION
Information and Communications Technology (ICT) is creating new dynamics for growth, prosperity and creation of wealth and has become an essential condition for countries and regions to meaningfully integrate into the global economy and reap the benefits thereof. The paradigm shift from the industrial to the digital economy is the very foundation of the new economy.

In order to derive benefits from the new economy, it is imperative for the SADC Region to review and refocus development strategies and approaches by aggressively using ICT as a catalyst for socio-economic development and prosperity. There is, therefore, an urgent need for SADC Member States adjust to the new digital environment in order to maximise the opportunities availed by globalization.
ANNEX III: