Use of Information and Communication Technologies for the implementation of the convention in order to facilitate public sector transparency and combat corruption.

I. INTRODUCTION

Corruption, by nature, thrives in an enabling environment which comprises key components including human to human interaction which is yet one of the primary causes of corruption. Needless to mention that in the event such services are not properly computerised, the direct contact between the public official and the service seeker might prompt for opportunities for corruption.

In line with Chapter I Article 7 of the United Nations Convention against Corruption (UNCAC), where Article 7. Each State Party shall, where appropriate and in accordance with the fundamental principles of its legal system, endeavour to adopt, maintain and strengthen systems for the recruitment, hiring, retention, promotion and retirement of civil servants and, where appropriate, other non-elected public officials...

In view of enhancing public sector integrity, the Government has undertaken a number of pertinent ICT-based measures spanning from the public sector to other key spheres of the economy to address the inherent risks emanating from such situations.

Promulgated in 2002, the Prevention of Corruption Act (PoCA) 2002 establishes the ICAC and criminalises an act of corruption. Pursuant to its prevention mandate, the ICAC Mauritius advocates for and conducts a number of corruption prevention initiatives and provides appropriate recommendations to public bodies in view of eliminating corruption opportunities or loopholes. Many of the recommendations are IT-based to reduce human interaction and to eliminate opportunities for corruption.

II. IT-BASED PUBLIC SECTOR INITIATIVES ADOPTED BY THE GOVERNMENT

A number of e-initiatives have been undertaken in the public sector including the launching of an e-Government programme in 2001. Amongst others, the e-Government programme aimed at enabling Ministries and Departments to integrate ICT within their operations and services to enhance effectiveness and efficiency. By encouraging ICT integration into its operations, the Government is limiting the human to human interaction especially in respect of service delivery and is increasing access to information. Thus, such initiatives are contributing towards reducing corruption opportunities.

* ENHANCED LEGISLATIVE FRAMEWORK

Along with the e-Government programme, a number of legislations have been enforced towards protecting data, preserving data integrity, increasing accessibility to information and regulating cyber security issues as follows:
- ICT Act 2001
- Computer Misuse and Cybercrime Act 2003
- Electronic Transaction Act 2000
- Data Protection Act 2004

These legislations definitely address key issues of cybercrime and cyber security and a number of offences which are liable to prosecution. These legislations set the ground for an increased use of ICT in reducing corruption risks and malpractices through inappropriate human interaction in the public sector and through increased access to information for more transparency.

**MAURITIUS E-REGISTRY PROJECT**

The Mauritian Registrar-General Department (RGD) has reached the second phase of the Mauritian eRegistry Project (MeRP). The first phase was completed in May 2014. The second phase of the MeRP will focus on transforming the services to electronic mode.

The key objective is to provide the RGD and stakeholders an electronic dashboard through which they can submit documents, pay fees, carry out registrations, searches and delivery of registered documents. The project is being implemented in two phases over a period of two years. The first phase was for the modernisation of the RGD by implementing the eRegistry software system.

**OTHER E-GOVERNMENT INITIATIVES**

The different e-government initiatives undertaken attempt, amongst others, to enhance access to public information through the following:

**Websites**
Every Ministry/Department now have their own websites where relevant information are readily available pertaining to the different services provided. Public can access such websites for information with respect to applications for permits, licences, amongst others and electronic versions of the documents along with appropriate guidance.

**Cabinet/ Government Decisions**
All cabinet decisions are rendered public on the same day on national television, radio and on the website of the Prime Minister's Office.

All legislative reports and discussions
All legislative reports and discussions, parliamentary questions, draft bills and legislations tabled at the Assembly are available in its library and its website.

**HANSARD**
All discussions in the National Assembly are recorded within 24 hours in verbatim and are available on its website.
All legislations and case judgments

All legislations and case judgments are listed on the website of the Supreme Court and accessible to the public.

Anti-Corruption tools and materials

Anti-corruption materials and tools developed by the iCAC are posted on its website and are accessible to the public and public bodies.

Go AML

The UN goAML project is an integrated web-application, developed by the UNODC. The goAML website enables online reporting of suspicious transactions lodged with the Financial Intelligence Unit (FIU) via the goAML Website.

III. RECOMMENDATIONS PROPOSED BY THE ICAC MAURITIUS THAT ARE BEING IMPLEMENTED IN VIEW OF BOOSTING PUBLIC SECTOR INTEGRITY

Pursuant to its prevention mandate, the ICAC has strategized, recommended and followed-up implementation of an array of ICT based measures in the public sector. Mostly focusing on the operations side, recommendations range from broader spectrum spanning from legislations amendments to simple immediate and costless changes in the day-to-day operations. Some of the actions are as follows:

- ICT-BASED RECOMMENDATIONS IN THE CORRUPTION PREVENTION REVIEWS

As per its corruption prevention mandate, the ICAC conducts corruption prevention reviews on existing systems and procedures. A Corruption Prevention Review (CPR) examines the systems, procedures and practices for public service delivery, identifies loopholes/ weaknesses and recommends measures to address these weaknesses. The aim is to improve transparency and accountability while reinforcing integrity.

Use of ICT in public bodies aim at prompting for an efficient and transparent delivery of public services thereby eliminating corruption/malpractices by substituting as far as possible manual processes which are vulnerable to corruption and reducing inappropriate human interaction between the public officials and the public. In the perspective to fight corruption, the ICAC, through its corruption prevention reviews of systems, procedures and practices, has recommended the use of ICT to public bodies, where appropriate, to carry out their functions to allow for more:

A. transparency and accountability
B. administrative procedural simplicity leading to speed up service delivery
C. effective controls and monitoring

The impact associated with implementation of these measures include enhanced transparency and accountability, better audit trail, lower risk of manipulation/tampering and provides for less human intervention/interaction.
A. TRANSPARENCY AND ACCOUNTABILITY

Transparency and accountability are key principles which are fundamental to corruption prevention. Implementation of ICT-based measures have been critical in driving these principles as follows:

- Using ICT to enhance access to information
ICT is an effective and efficient medium to provide relevant information to the public in a transparent and accountable manner. The use of ICT also brings more fairness and symmetry distribution of relevant information to the public. For instance, information with respect to applications for licences, permits/clearances are disseminated through relevant websites thereby reducing processing time as well as enquiries on applications. In addition, electronically available customer charters provide maximum information to customers on requirements and steps involved in the application and processing of such licences or permits.

Some examples of ICT-based recommendations made by ICAC that are being or have been implemented by public bodies:

- Local Authorities are making use of their respective website to disseminate relevant information with respect to application procedures for building and land use permits along with guidelines where appropriate.
- The National Transport Authority is using its website to post updated Information on the last registration mark of vehicles reached in the running series to render the allocation of reserved registration marks more transparent whilst ensuring fairness.
- The University of Mauritius is advertising information on scholarships on its website thereby reducing the perception of favouritism and increasing competition in the pool of candidates applying for the course.
- Training and development opportunities are communicated to all staff through the website of Central Information Systems Division (CISD). Nomination results are publicised in both CISD’s website and notice boards to ensure employee’s trust in the nomination process.
- All vacancies in the public service are posted on the website of the Public Service Commission along with online application facilities.
- The Irrigation Authority is informing the public, through notices, of the availability of vacant plots through its website so that all interested citizens are given sufficient time to submit their applications for allocation of state land on lease. The notice includes the approved eligibility criteria thereby promoting principles of transparency and fairness.
- The Civil Status Division (CSD) has published its Customer Charter along with Information pertaining to application for birth/marriage certificates on its website for communication to the general public.
- Most of the Ministries and public bodies have developed Customer Charters which have been posted on their respective websites.

B. ADMINISTRATIVE PROCEDURAL SIMPLICITY

ICT is being widely used in the conduct of public affairs to simplify administrative procedures and to reduce red-tapism leading to hassle-free public service delivery and most importantly greater customer
satisfaction. To achieve administrative procedural simplicity, ICAC has made a number of recommendations including:

- **Computerised Systems in Public Bodies**

  Prior to conduct of CPRs, it was noted that the operations/activities of a number of public bodies were still based on manual operations. As a corruption prevention strategy, the ICAC has recommended the prompt computerisation of these operations/activities to improve organisational efficiency and simplify the procedures in place. Computerisation of systems and processes also limits opportunities for forgery, malpractices and corruption. Some examples of the types of recommendations and their impact made with respect to computerisation in public bodies are as follows:

<table>
<thead>
<tr>
<th>Public body where ICAC recommended for computerisation</th>
<th>Impact noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritius Rights Management Society</td>
<td>More transparency and integrity in the management of copyrights</td>
</tr>
<tr>
<td>National Transport Authority (NTA)</td>
<td>An Integrated system for licensing, registration, cash and Motor Vehicle Licence (MVL) together with payment for MVL on a day-to-day instead of monthly basis</td>
</tr>
<tr>
<td>Tourism Authority (TA)</td>
<td>Minimised the risk of fabrication of fake licence and malpractices</td>
</tr>
<tr>
<td>Ministry of Labour, Industrial Relations and Employment</td>
<td>Streamlined e-work permit system</td>
</tr>
<tr>
<td>University of Technology, Mauritius</td>
<td>Computerised accounting system for minimising human intervention, increasing transparency and accountability, reducing risks of corruption and for effective monitoring</td>
</tr>
</tbody>
</table>

- **Online Services**

  Following the conduct of CPRs and in view of minimising human to human interactions while procuring for a service, recommendations were made for public bodies to adopt online services for licences, permits or clearances. Some examples of such online services are as follows:

<table>
<thead>
<tr>
<th>Public body where ICAC recommended the adoption of online service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT platform at the Customs Department of the Mauritius Revenue Authority</td>
<td>Electronic submission of the required documents to minimise direct contacts between the declarants and Customs Officers. The IT system of the Customs Department electronically allocates a Customs Officer for the review of customs goods declaration at random</td>
</tr>
<tr>
<td>Full computerisation of the procedures and processes at the Civil Status Division (CSD)</td>
<td>Computerisation has led to prompt delivery of birth certificates and marriage certificates thereby reducing the risk of errors or fraud. Online application for celebration of marriages between non-citizens has reduced corruption opportunities. The present system along with the new ID cards have allowed for the introduction of barcode readers to minimise mistakes / malpractices</td>
</tr>
</tbody>
</table>
With respect to the CPRs conducted on the recruitment and selection exercises, public organisations were called upon to make optimum use of ICT namely:

- Advertising all job vacancies on the websites of respective organisations.
- Availability of the e-application forms on the websites for wider dissemination, accessibility and transparency.
- E-acknowledgment of receipt of applications and communicating outcome for a post using emails and websites for increased transparency.

It is worth noting that presently, sixty-nine (69) e-services are available on the e-government platform and to meet the growing needs of the citizens, fifty new e-services will be supplemented on this platform during the year 2016/2017 following a cabinet decision of 7th April 2016.

C. EFFECTIVE CONTROLS AND MONITORING

ICT is being widely used to improve control and to effectively monitor the operations of public organisations. The CPRs recommended a number of measures using ICT to reinforce the control and monitoring mechanisms and to prevent corrupt practices/malpractices. These include the following:

a) CCTV System
The Closed Circuit Television (CCTV) system is a powerful tool that can significantly contribute to enhance the surveillance action in a transparent and accountable manner. The implementation of such system has enabled public organisations to:
(i). Exercise greater control over public premises;
(ii). Focus on productivity improvement, vehicle monitoring, staff movement and safeguards of public resources; and
(iii). Deter staff from engaging in malpractices/corrupt behaviours.

The cost of implementation of the CCTV system has decreased over the years and the installation and use of CCTV system has resulted in improved controls/safeguards in several public bodies including the Mauritius Police Force (MPF). As a regulatory and enforcement body, police officers are endowed with high discretion in the execution of their duties and such situations provide opportunities for corruption/malpractices. A number of measures using advanced technology are being implemented by the MPF to enhance controls and to prevent corrupt practices/malpractices as follows:

- Detection of Traffic Offences Using Fixed Cameras
  In the past, detection of offences were made visually or through use of specific handheld detection devices such as radars. These methods were subject to human intervention and it conferred police officers with high discretionary powers and provided the opportunity to have face-to-face contact with the public thereby creating grounds for corrupt practices/malpractices. One of the IT-based measures implemented is the installation of fixed cameras at different strategic points to better enforce the traffic regulations and reduce the face-to-face contact.

- Monitoring of Practical Tests for Driving Licence at Mauritius Police Force
  Demand for driving licences has increased considerably and a mounting pressure is exerted on the licensing systems. As a consequence, there is a high propensity for corrupt practices to occur in the MPF. As a measure to address such risks in the issues driving licence system, the use of video recordings system integrated within the cars is being implemented to monitor the conduct of practical road tests.

b) Electronic Attendance / Global Positioning System (GPS)
The use of ICT system is being used to capture attendance of staff over the manual attendance system. The manual attendance registers are subject to tampering and renders control over employees working on-site, outside the office quite difficult, at times. The use of electronic attendance has resulted in better control over attendance and overtime performed in public bodies for judicious use of public funds.

As far as overtime is concerned, the use of latest ICT for controlling overtime of staff working on-site outside the office were recommended. Where applicable, GPS for vehicle tracking together with Fingerprint Attendance Readers are integrated in the public vehicles used for the conveyance of on-site employees. This assists, in the capture of accurate information about attendance and acts as a deterrence to malpractices and abuse of office.

c) An Integrated Information System for a coordinated and structured approach
An integrated information system with real data helps to provide effective results and detect malpractices and errors. Government provides various social aid to the needy persons and other services to the public. CPRs have revealed that various IT systems were not integrated and were operating in isolation with risks to integrity of operations. The main measures being implemented to enhance controls in the public bodies to avoid overpayment, malpractices and to obtain updated information are as follows:
Integration of the computer systems of the National Savings Fund (NSF) and National Pensions Fund (NPF) ensures that all employees applying for pension be immediately informed about their right to claim for NSF lump sum, if ever they are eligible for same. This measure allows the NSF to be up-to-date thereby avoiding unfair situations.

- Harmonisation of the social aid and benefit modules of the Local Office System of the Ministry of Social Security National Solidarity and Reform Institutions (MSS). This integrated information system with inbuilt controls is important to avoid data manipulation and helps to track any claimant who is tampering with the system to benefit from any social aid.

**d) Reinforcement of Regulatory Functions through Maintenance of Database / Management Information Reports**

The use of ICT was recommended as a corruption prevention strategy to public bodies to reinforce their regulatory duties and ensure compliance to the relevant legislations as follows:

- **Maintenance of Database for Regulatory Functions**
  The implementation of a computerised system with an integrated database with updated and real-time information provides the public bodies with a structured approach to exercise regulatory functions and is a prerequisite to ensure transparency, objectivity, fairness, and to prevent corruption and/or malpractices.

- **Management Information Reports for better decision-making**
  Inbuilt IT systems in public bodies help the easy generation of Management Information Reports thereby easing the process of decision-making and structured planning. The use of timely and concise management information reports also brings more accountability in public bodies.

**IV. OTHER ICAC INITIATIVES**

In view of sustaining the anti-corruption momentum in public bodies, the ICAC is advocating for the following additional initiatives:

- **Development of a Best Practice Guide – Information Technology Systems Security**
  The ICAC is working in close collaboration with the public sector in view of drafting a comprehensive set of guidelines in view of promoting judicious use of IT systems and processes. The core objective of the Best Practice Guide is to bring about a common understanding of the required ethical norms with respect to the use of IT systems and the responsibilities of the public official therein. The Guide is still at the draft stage.

- **Online Learning Management System**
  Almost all systems and processes in the public sector are being subject to computerisation prompting for e-learning as a complementary learning approach. In this vein, an Online Learning Management System (LMS) has been adopted by the Ministry of Civil Service and Administrative Reforms in 2016. The LMS, which is being implemented in collaboration with the UNDP in three phases, would be culminating into the development of web-based courses for public officials.
In view of providing the anti-corruption perspective to the LMS, the ICAC has developed one module on anti-corruption and related issues. The LMS is meant to empower public officers to recognise, resist, reject and report corruption while reinforcing public sector integrity. It contains some essential elements of the Prevention of Corruption Act (PoCA) 2002, case studies on corruption, highlights of corruption risk areas/management, and anti-corruption tools which can be used to enhance organisational integrity in the public sector. This anti-corruption module is expected to be uploaded on the LMS soon.

- **Integrity Management Toolkit**

  In view of reinforcing public sector integrity, the ICAC has developed an integrity Management Toolkit. This Toolkit is meant to guide Integrity Officers in fostering a culture of integrity in their respective organisations and will be available in e-version. Effective use of this toolkit by Integrity officers will no doubt enhance their understanding of public sector corruption and reduce its impact on the organisation. The Toolkit paves the way for an integrated model of public sector governance where effectiveness, efficiency, transparency, accountability, integrity, effective controls and ethics would be the norm, thus, making both management and staff allies in the consolidation of an ethical organisational culture.

- **ICAC IT Forensic Lab**

  The ICAC is called upon to handle corruption and money laundering cases where the modus operandi of the offences are IT-driven. Thus, the use of multiple IT related technologies are being made in committing those offences.

  In view of addressing such emerging technologies, the ICAC has set up an IT Forensic Lab with the assistance of the US Embassy through the provision of IT equipment and relevant software. Also, in view of easing this process, a number of training sessions have been conducted for investigators by the International Law Enforcement Academy in collaboration with the US Secret Service; and under the Anti-Terrorism Assistance Programme under the US Bureau of Diplomatic Security on Cyber Unit Management and the Digital Forensics and Investigations.

  Following those trainings, many ICAC officers are now “EnCase recognized” which implies that they are recognized users of the international cybercrime software. For the time being, the Cybercrime Unit of the Mauritian Police Force is entrusted with the responsibility of handling IT-driven corruption and money laundering offences.

- **Online Reporting of Alleged Cases of Corruption**

  The ICAC has developed a secured online reporting form on its corporate website where it receives complaints pertaining to alleged cases of corruption. It is to be noted that such reports are done in strict confidentiality since there are strict security norms which are abided to with respect to online reporting. In addition, this mode of reporting provides the informer with the choice of remaining anonymous or disclosing their identity.

V. **Impact of ICT in Public Bodies**

Following the corruption prevention exercises, the implementation of ICT in the public bodies has brought about considerable changes in the areas reviewed. The impact of implementation of these measures are summarised as follows:
a) Enhanced transparency, accountability and better controls in the public affairs

The use of ICT as a medium for communication, submission of applications and among others has contributed in the wide dissemination of information and accessibility to one and all. These measures have enhanced transparency, fairness and accountability in the public affairs. Furthermore, it resulted in better safeguarding of public resources, deterring/detecting malpractices and reinforcing controls in public affairs.

b) Improved audit trail in the systems

The use of ICT with controlled accesses in public bodies has had considerable impact on audit trails. Audit trails can be carried out to verify input and change of data within the systems, thus reinforcing the oversight mechanisms in place in public bodies.

c) Streamlining of processes and speed up of service delivery

As a result of implementation of ICT in public bodies, processes have been streamlined, improving the workflow and ultimately speeding up the service delivery. With the adoption of ICT in the public sector, citizens can now obtain speedy public services in a hassle-free and convenient manner.

d) Less Human Intervention/Interaction

The implementation of ICT projects have helped to reduce human intervention/interaction in the public bodies. Face-to-face contacts between public officials and the citizens provides grounds for corruption and the use of ICT has changed the way public affairs are conducted.

e) Greater Customer Satisfaction

The use of ICT has undoubtedly enhanced the delivery of public services which has resulted in greater customer satisfaction. Given the high e-literacy rate among the citizens and high IT penetration in Mauritanian society, the utilisation of ICT in public bodies has changed the way public affairs are conducted and public services are delivered with more transparency, fairness, accessibility, promptness and effectiveness.

f) Reduced risks of corruption and malpractices

Less human interaction and more IT-based systems and processes lead to situations where opportunities for corrupt practices are reduced since the direct contact between the service seeker and the service provider are minimised.

VI. CONCLUSION

A comprehensive ICT reform can significantly decrease corruption opportunities by increasing transparency, reducing systemic hurdles, eliminating administrative red tape, increasing the risk of detection, enhancing accountability mechanisms and ultimately improving service delivery by employing user-friendly administrative systems. With respect to the different recommendations proposed by the ICAC to public bodies, most of these have already started reaping benefits since corruption opportunities have been largely minimised; thus public sector integrity enhanced. However, one cannot take for
granted that computerisation solely can inherently prompt for a full-proof anti-corruption system since a number of other challenges lie ahead including emerging security issues. Also, the human aspect (people integrity) is crucial in ensuring judicious use of IT and ensuring that corruption and other malpractices do not occur. Thus, public bodies should continue on instilling proper checks and balances in view of sustaining integrity of data and processes whilst safeguarding public sector integrity and avoiding emerging integrity risks.
MAURITIUS (SECOND MEETING)

Article 10: Public reporting

Taking into account the need to combat corruption, each State Party shall, in accordance with the fundamental principles of its domestic law, take such measures as may be necessary to enhance transparency in its public administration, including with regard to its organization, functioning and decision-making processes, where appropriate. Such measures may include, inter alia:

(a) Adopting procedures or regulations allowing members of the general public to obtain, where appropriate, information on the organization, functioning and decision-making processes of its public administration and, with due regard for the protection of privacy and personal data, on decisions and legal acts that concern members of the public;

(b) Simplifying administrative procedures, where appropriate, in order to facilitate public access to the competent decision-making authorities; and

(c) Publishing information, which may include periodic reports on the risks of corruption in its public administration.

2.1 Government Online Project

With this project public bodies have been encouraged to develop their own website with the support of the National Computer Board whereby the services and other information pertaining to the organization are displayed. This particular project has increased transparency in certain public bodies. This project has also reduced contact between public officials and members of the public seeking the services of the organization. To further enhance transparency in public bodies most of the ministries have developed customer charters and the Procurement Policy Office has introduced E-procurement with a view to increase competition.

2.2 Public Sector Anti-Corruption Framework

As part of its mandate, the ICAC has the responsibility to examine systems and practices in public bodies and to recommend measures with a view to curbing the opportunities for corruption. Accordingly, the ICAC has developed the Public Sector Anti-Corruption Framework (PSACF) to enable public bodies to establish the requisite capacity to prevent and combat corruption in their sphere of operation.
The framework recognizes the importance of detecting, preventing and combating corruption. It aims at strengthening institutional capabilities of public bodies through the establishment of appropriate mechanisms to control corruption. The objective of this initiative is to assist public bodies in the setting up of anti-corruption strategies, evaluating them independently and improving on existing measures.

The Framework will enable public bodies to take up ownership of building corruption resistance in their respective organizations. The project is being piloted in 4 public bodies. The Government has committed itself to the implementation of the framework in all public bodies. The pre-requisites of the framework is to develop and implement an integrated Corruption Risk Management Plan and to oversee and coordinate implementation of corruption prevention strategies and monitor progress. The prime responsibility for development and implementation of the corruption risk management plan rests with the Anti Corruption Committee (ACC). The ACC will have to decide and select the function or department in the organisation which is highly prone to risks of corruption and where the CRM will be undertaken. The above decisions will depend on the size and complexity of the organisation in terms of departments and functions.